

The Listener

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'The Nativity', by Hans Memling (1435-94)

Christmas 1952

HOLD THAT TIGER



A FIRM of building contractors working on extensions to a dry-dock on the Clyde were faced with a difficult problem. They had to blast out a concrete wall — more than 1,000 tons of it — without damaging a ship in the dock only 17 feet from the nearest blasting point. It was also important that the demolition should not interfere with other work going on nearby. The contractors turned to I.C.I. Nobel Division for assistance and a team of experts from the Division's technical service department undertook to do the job. They worked on a plan of controlled blasting, using the explosive Polar Ammon Gelignite to "lift" the concrete in 8 foot sections. To prevent damage from blast and flying concrete they put up special steel screens and covered each set of shot holes with steel nets and sandbags. This technique proved entirely successful and the wall was demolished without incident.



The Story of Christmas

has entered deep into our British heritage: the dark night, the crowded inn and the Child born in a manger among the beasts because there was no room anywhere else. Under all the outward show of Christmas, this story and its meaning hold the imagination in wonder. In a tragic world it is a perennial source of hope.



The same story has entered into the language of other peoples: it can be read now in over a thousand tongues and the number grows at the rate of about six a year. But to provide the Scriptures in the languages of the world and at a price people can pay is a costly business.

Will you make it possible for someone on the other side of the world to obtain a copy of the Scriptures in his own language by sending a gift this Christmas to

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CONTENTS

RELIGION:	SCIENCE:
Meditation for Christmas Day (Rev. H. A. Williams) 1055	Life, Time, and Thermodynamics (A. R. Ubbelohde) 1070
THE WORLD TODAY:	Television for Marine Research (Harold Barnes) 1076
'The Miracle of the Netherlands' (Elka Schrijver) 1057	NEWS DIARY AND PHOTOGRAPHS OF CHRISTMAS ENTERTAINMENTS ... 1072
We Came to England (Lili Kowalska) 1058	MISCELLANEOUS:
Britain's New-Style Coal-Miners (Sam Pollock) 1069	Mulled Wine and other Christmas Fare (Isabelle Vischer) ... 1075
POEMS:	LETTERS TO THE EDITOR
The Rokeby Venus (Robert Conquest) 1059	From Sir Douglas L. Savory, M.P., E. A. Lawler, Professor John
Holy Places (Wilfred Rowland Childe) 1081	Wisdom, Edmund Dews, and Paul Bedford 1077
The Yellow Plum Tree (Alexander Henderson) 1084	BIOGRAPHY:
THE LISTENER:	Recollections of Benedetto Croce (Guido Calogero) 1080
'Post-Christian' Era? 1060	LITERATURE:
What They Are Saying (foreign broadcasts) 1060	Edwin Drood and Governor Eyre (K. J. Fielding) 1083
DID YOU HEAR THAT?	The Listener's Book Chronicle 1085
The Woods at Christmas-time (John Hillaby) 1061	New Novels (Stephen Spender) 1087
Water Leaks and Isotopes (Valentine Selsey) 1061	CRITIC ON THE HEARTH:
Fishing in Malaya (Deryck W. Le Mare) 1062	Television (Reginald Pound) 1088
Uncovering Church Paintings (E. Clive Rouse) 1062	Broadcast Drama (J. C. Trewin) 1089
THE REITH LECTURES—VI	The Spoken Word (Martin Armstrong) 1089
The World and the Greeks and the Romans (Arnold Toynbee) ... 1063	Broadcast Music (Dyneley Hussey) 1089
ART:	MUSIC:
The Celestial Damsels of Khajrao (Francis Watson) 1065	Stravinsky and 'The Rake's Progress' (Felix Aprahamian) ... 1090
Four London Galleries (pictures) 1082	FOR THE HOUSEWIFE 1091
TRAVEL:	NOTES ON CONTRIBUTORS 1091
Against the Grain of America's History (Peter de Mendelssohn) 1067	CROSSWORD NO. 1,182 1091

Meditation for Christmas Day

By the Rev. H. A. WILLIAMS

ON the first Christmas Day mankind came of age. It took possession of its inheritance. To understand this we have first to understand why God made man. During the past hundred years or so we have been so busy discovering how man came into being that we have largely ignored the purpose of the process. Nor can the natural scientist help us here. He can tell us a great deal about human origins. And sometimes he thinks it possible to forecast the future of the race. But he cannot provide us with a teleology. He cannot describe the ultimate purpose of what he exhibits. The answer to the question 'Why?' is not given in the laboratory. Christians believe it was given in a stable. For there the perfect man was born, the man whose life and character reveal the purpose of our creation. The Word, says St. John, was made flesh. In the birth of Jesus, God's thought was uttered.

Before we consider this, however, we must first notice that from one point of view the birth of Jesus was the climax of a process of development. That is what St. Matthew and St. Luke are telling us in those tedious genealogies of Jesus which they give us at the beginning of their Gospels. Jesus had ancestors. St. Luke takes us back to Adam. We perhaps would like to go back to the amoeba. But the point is the same. The past of the human race has contributed to the final result. Jesus is the last term in a series. He is the heir of the experiences of mankind down the ages. Most notably is this true of the religious experience of His own nation. It was from the written record of their experience that He formed His sense of vocation and destiny. Only

one steeped in the Jewish Scriptures could have thought of his life and work as He did. In short, Jesus was historically conditioned as all men must be. He was the son of Adam, the son of David, the son of Mary. His perfection was a truly human perfection, containing in itself what had gone before. Humanity's long minority issued in this full-grown man. And in this crown and flower of the race the question 'Why?' was answered. The purpose and meaning of human life was revealed.

What, we must therefore ask, was the most striking characteristic of Jesus? It is not easy to have to summarise, but perhaps we should not be far wrong if we said that the most striking characteristic of Jesus was His sovereign freedom. Never was He the victim of men or circumstances. Always He was their master. In face of opposition or misunderstanding or rejection he still dominated the scene. In the end He was crucified. But He was never crushed. According to St. John, His last words upon the cross were 'It is finished'. And those words epitomise His continuous victory over the contradictions of life. What-ever happened to Him, Jesus was always free.

It is possible to achieve a certain kind of freedom by cultivating an attitude of detachment towards life. In the time of Jesus, the Stoics preached such a gospel of detachment. Outward circumstances are not in our power: but what we can do is to train ourselves to be indifferent to them. The world's unrest and suffering, the tyranny of human affection, from these we can be free by inducing a kind of refrigerating process in the soul. So, for instance, at the sight of another's distress,

for the sake of kindness we may groan with him. But we must take care that the groan does not come from within. There is a certain attractive grandeur about such a freedom as this. The difficulty of its attainment, the strict inner discipline which it demands, make an appealing challenge. But essentially it is freedom by flight. It comes not by meeting life but by evading it. If you like, it is freedom by suicide. We can have it only by killing half of ourselves. Certainly it is not sovereign. We do not master life by insulating ourselves from it.

The Human Emotions of Jesus

The freedom of Jesus was of a totally different order. Nobody was less detached from life than He was. He entered into the sicknesses and sorrows of others and made them His own. He was moved with compassion by the sight of a multitude or the appeal of a leper. He wept at the grave of Lazarus. He had one special disciple whom He loved. The night before He died, He was seen in an agony and was heard to pray that He might be relieved from His bitter destiny. On occasions He was even angry—at religious smugness or claims to moral superiority. And when He thirsted upon the cross, He proclaimed the fact—as it happened, to the world.

No, His freedom came not from detachment but from His willingness always to give Himself to others in the strength of love. That is why He had to suffer. You cannot love without becoming vulnerable. That price Jesus was prepared to pay. So we find Him always caring supremely for the good of those with whom He had to do, and spending Himself on their behalf in complete disregard of the claims and needs of His own person. It is noticeable, for instance, that when anybody tried to insult Him, His concern was not with His own wounded dignity but with the inner sickness from which the insult sprang. Here we see His sovereignty in operation. If you have no self-concern, if your only concern is for the good of those with whom you have to do, then you will probably suffer, yes, but you will also be able to turn every situation to the achievement of your purpose. Nothing will be able to destroy the freedom of your intention. No wonder we find in Jesus a poise and balance which makes Him equal to all occasions. It is the outward sign of His inner freedom—the freedom which can come only from the love which seeketh not its own.

But our portrait of the first full-grown man is not yet complete. The most important thing of all has still to be mentioned. Jesus lived to give Himself to others whatever it might cost Him in toil and suffering. And thereby He possessed a freedom which made Him sovereign over all things. But is there not something illusory, something subjective, about this sovereignty? After all, at an early age Jesus was rejected and executed. Most people would not accept what He had to give them. 'We will not have this man to reign over us'. It could be argued that it was in vain that He had spent Himself on their behalf. And if so, could not His apparent freedom be interpreted as a psychological compensation for failure, one of those convincing fictions by which men make life tolerable for themselves?

Sovereign Freedom

That is certainly a possibility, a possibility of which Jesus Himself appears to have been agonizingly aware as He was dying upon the cross. Yet here once again, in and through the torture of this very doubt, He exercised His sovereign freedom. He converted the doubt into a final opportunity for self-giving. For behind the giving of Himself to men there lay a prior giving of Himself to God. And it is in His relationship to God that we see the highest point in the exercise of His freedom. All through His life, spontaneously, lovingly, He committed Himself to God's will and gave Himself to the achievement of God's purposes. All He did and said was but the acting out of this total self-committal to God. And in that loving surrender, He found His freedom. If, in the Gospels, we see Him never as the victim but always as the master of men and circumstances, that is because He lived not to do His own will but the will of Him that sent Him. So, upon the cross, when the possibility that His life had been founded upon an illusion seemed all but a certainty, He transformed His doubt into the greatest of all acts of faith. And what is faith but self-giving to God, even when the darkness totally obscures the signs of His presence? The gift was accepted. The life of Jesus was taken away. But, as Christians believe, on the third day after He rose again from the dead. And now, to those who knew and loved Him, His sovereignty was manifest and explicit—'All authority hath been given unto me in heaven and on earth'. It was still the sovereignty of the love which gives to the uttermost.

Such, then, was the first full-grown man, the man in whom the human race came of age and whose birth we celebrate today. He shows us why we were created. From Him we learn that men exist to appropriate and enjoy a royal freedom, a freedom by which they have dominion over all things. That is the inheritance stored up for them in God's purpose and of which Jesus was the first man to take full possession. It is not a freedom founded upon any physical or intellectual superiority, just as it is not a sovereignty achieved through any form of coercion. It can be appropriated only by giving oneself away in a total surrender, so that God, and not oneself, is the master of one's life, and His will and not one's own is the mainspring of one's activity. But how can we do it? How can we appropriate and maintain this freedom? What is the secret of this coming of age?

Jesus, we said, from one point of view was the climax of a process of development. The past history of the race contributed to what He was. In Him humanity reached its apogee, or, as we have put it, became full-grown. The mere passing of years, however, does not necessarily ensure that a person grows up. Many people live in a state of frustration because they cannot attain maturity. Sometimes it is possible for them to attain it if some sort of action is brought to bear upon them from outside. They meet, shall we say, a mature person. They identify with his maturity and in time make it their own. In doing this, they do not destroy their own personalities. Quite the opposite. The identification with the other person enables them to become their real selves, their full-grown selves. That, of course, is the technique of psychoanalysis, a convenient analogy, though like all illustrations it is by no means perfect nor will the parallels be in any way exact.

Opening the Way to Maturity

But in the time of Jesus (as today) humanity was very far indeed from having reached its God-intended maturity. It was nowhere near attaining the sovereign freedom for which it had been created. It had, in fact, locked itself up in the dungeon of its own infantile egotism, and had lost the key. And from this prison-house its crude and repeated attempts to grasp dominion brought only misery and frustration. Here was an insoluble problem. Humanity could not of itself grow up. Yet to be real the growth had to be its own. But what man could not do, God did. God solved the problem and did it by means of an identification. God, who is perfect self-sufficient Being, identified Himself with man. Not, of course, by a sort of psychological fiction, but by real and permanent union of His Godhead with our manhood. The full Being of God was united to the being of man, but in such a way that the manhood was not violated or destroyed. Just as in our illustration the immature person, by identifying with somebody mature, reaches a maturity of his own which enables him to be his real full-grown self, so God, when He put on humanity, enabled mankind of itself to attain its full stature. In Jesus we see God identifying Himself with manhood, and so making it possible for man as man to grow up. For it was as the son of Adam, as a historically conditioned person, that Jesus appropriated that sovereign freedom for which man had been created. That is why, although He was God, we can still speak of Him as the crown and flower of our race.

But Jesus is more than that. As man, he is Himself, a figure with whom all men can identify. And once again, this is not a psychological fiction. Our oneness with Christ is affected by the most real thing there is—by the power of God. God it is who, in the old words, makes us members of Christ and thereby enables us to share in the rich maturity of his manhood. All that Christ was and is is now ours to take and use. So that we also may attain His freedom and reign with Him. And in so doing our personal identity is not destroyed. We become more ourselves, not less, just as the free man is more himself than the slave.

The gaiety of Christmas is thus a genuine gaiety. It is not a form of escapism, since what we celebrate is a genuine escape, a liberation which enables us to become what we were meant to be. The birth of Jesus has made it possible for us to come into our own, to revel in the free exercise of our highest faculties. It has, in fact, effected a transformation-scene. 'We jump out of bed', wrote Mr. H. G. Wells, 'and straight away we stumble over our stale selves of the day before. I couldn't believe that life was just the slow procession of dusty events it seemed to be. Dusty, greyish events, with a lot of rather forced laughter and streaks of downright disagreeable experience. Presently, somebody or something, I imagined, was going to draw the curtain and say "Prince, your time has come"'. That announcement was made to us all on Christmas Day.—*Third Programme*

'The Miracle of the Netherlands'

By ELKA SCHRIJVER

AS far as I know, it never has happened that the Speaker of your House of Commons opened a debate in self-made verse, and that a number of members of the House then burst into rhymed replies. If I now tell you that this actually has happened in our Second Chamber and in the Amsterdam city council, you must not think that we have suddenly become a frivolous nation of poets. This impromptu verse happens only once a year: on December 5 which is the birthday of Saint Nicholas, who was protector of all children and somehow the patron saint of Amsterdam. So, every year, usually on the last Saturday in November, he arrives by ship from Spain, as the legend has it, with his white horse and his Blackamoor servant. He is then officially received and rides through the streets of Amsterdam, which are lined with nearly all the Amsterdam children. This is the beginning of the most festive season of the year.

There is a great difference between the way we celebrate Saint Nicholas, and the way you give your presents at Christmas. For the most essential thing about Saint Nicholas is that all gifts are supposed to be given by him, and therefore are, or should be, anonymous. Also, there should be as many parcels as possible, wrapped up in a mysterious way, with lots of practical jokes, and always with some lines of verse, or a longer poem, which further mystifies the receiver of the parcel. So now you can understand how it is that, on the first days of December, practically every man, woman, and child in the Netherlands is feverishly writing verse, searching their brains for rhyming words and, on the slightest provocation, may break out into verse, just for the fun of it.

Although in recent years, to some extent, presents are also being given at Christmas—which here is still first and foremost a religious event—the bulk of the gift season, as far as buying is concerned, is during the first week of December. And, just as is the case in England with the Christmas buying, our Saint Nicholas buying is very much a barometer indicating the general state of affairs in the Netherlands.

For the first time since the war, we seem, this year, to have been approaching the pre-war zest for giving many gifts. By the look of it, everyone thought the shops were doing amazingly well this year, but when, last week, I started talking to the shopkeepers, I found them only reasonably satisfied. Yes, a little more money had been spent than last year, but the bulk of it had been spent on a great many very small gifts. Small shopkeepers, as well as the management of large stores, the owner of the chocolate shop, the book shop, the grocer, and the jeweller, all made the same remarks: a great many buyers and a lot of small purchases. Summing it up: the Saint Nicholas shopping seemed, by the look of it, much better than it actually was.

This is very typical of the general state of affairs in the Netherlands during the past few years. Every summer I found it extremely difficult to explain to foreign visitors how it was that everything looked so prosperous, that there were hardly any visible signs left of the war damage, and that everyone complained about the hard times. It was difficult enough to understand and very much harder to explain. We had no more rationing, all our shops were filled with lovely goods, and quantities of luscious food, everyone looked well dressed in new clothes, the streets were filled with a vast number of expensive motor-cars,



'St. Nicholas' riding through the streets of Amsterdam, welcomed by hundreds of Dutch children



Price-slashing display in a shop window in Amsterdam

everyone seemed to have a new wireless set: even jewellery and expensive furs and other articles of luxury, such as were unknown in our shops before the war, were not only available but even sold.

Our railways have been running more trains than before the war; most lines have now been electrified; our fares are the lowest in Europe, and the Netherlands State Railways are the only railways which do not run at a loss: they even make a small profit. Ships and docks have been rebuilt, we again fly all over the world, factories are humming, farming is modernised, and even houses have started to be built. Everything seemed lovely, and everyone one knew or met at once started talking about the hard times and the high taxes.

We ordinary people, trying to explain this strange gap between one, very visible, reality and another which, although invisible, was none the less real for that, were simply baffled by a phenomenon which, in circles of international finance, is known as 'le miracle nederlands', the miracle of the Netherlands: namely, that our unfavourable balance of payment suddenly turned into a favourable one. Before

I start explaining this miracle, I want you to realise that such a very small nation as ours, is, naturally, to a very great extent dependent upon everything that happens all around us. Marshall Aid has helped us enormously in rebuilding our industry after the war but, apart from that, every political and economic and financial move anywhere else in the world sooner or later influences our lives here. And since we have practically no raw materials, we have to buy almost everything in the world markets.

Now for this miracle. We are the only country which, during the past three years, has substantially decreased its national debt. How did we do that? We did it with money raised by very high taxation. Now if you think that out of the taxpayers' money all our social services are being paid, and all the other services which are either run or subsidised by the state, and the war damages, and rearmament for Nato, you can understand how very, very high our taxes must have been—and still are—to be able also to repay such a noticeable proportion of our national debt. For most of us the very high taxes meant less money to spend. And for trade and industry it meant much smaller profits, not enough money to build reserves, to buy new machinery, to expand and develop their business. A most complicated system of government measures restricted the activity of our Stock Exchange and made private investments almost impossible, and because profits are taxed away, and savings and investments are made unattractive, this led to rather reckless spending—hence the expensive cars and furs and jewellery. And if the miracle had not happened, we should have been involved in a very serious crisis long before now, the miracle being, or seeming to be, that our exports have, so far, saved us from this crisis. Holland has been for some years now an island of cheapness, and that is why we have been able to sell quite a good deal. But are our goods really as cheap as we sell them?

The answer is: we do not know; nobody knows. Why does nobody know? Because so many things have been subsidised. The whole system of subsidising has grown so complicated that even the cleverest experts can no longer work out what is the real price of a particular article. It may well be, therefore, that we are exporting some things without making any profit, or perhaps even at a loss. We just do not know. And how do we subsidise all these things? Out of the taxpayers' money. And so the spiral goes on and on and on.

Last June we elected a new parliament, and only last September a new Government was formed. Its first budget is being discussed now. It is rather early days to say anything about it. We have many different

parties and, because we have the system of proportional representation, eight of these are represented in parliament. The former government was made up of our Labour Party with twenty-seven seats and the Roman Catholic Party with thirty-two, together making fifty-nine out of the 100 seats in the Second Chamber. In this newly elected chamber, each of these hold thirty seats but the new Cabinet also includes members of both Protestant parties. The Government majority is now overwhelming, as they hold eighty-one seats between them, but they disagree on almost every subject. So less even than before will it be possible to foresee what all the differences inside the Cabinet will lead to.

Whatever the merits of proportional representation, the British system of absolute majority in each constituency has one particular advantage that ours lacks: the feeling of having one's own member of parliament. We have no special member, we only have the whole party we voted for; so whenever we wish to draw attention to some particular question, it all depends upon the subject which of the various members of a party one had best approach. Because of this lack of personal ties but much more so because it becomes increasingly difficult to understand the measures that are taken, and the reasons why, interest in what our Government is doing is decreasing and so is the feeling that some members of our parliament do really represent our interests. We have, therefore, and I think the same will be true of most countries, a small group which is extremely interested in what happens here, as well as abroad—the United Nations, Federal Europe, South Africa, and Korea, etc.—and a vast majority which hardly knows what these things mean. This vast majority, not knowing, far less understanding, the international background, gets alarmed, or disgusted, or both, about various things—such things, for instance, as German rearmament and the very lenient attitude towards war criminals, abroad as well as in our own country.

Yet I think that we have far more to be grateful for than we dared hope seven years ago: although we are still faced with enormous difficulties at home, like those I mentioned, as well as the housing shortage and over-population, Indonesia, etc., and also those on an international scale, such as exports and imports and finance. Miracle or no miracle, apart from another war I think we shall slowly succeed in building a real prosperity. For the Dutch are well fed, in very good health, and they work very hard. In spite of the remnants of the demoralising influences of the war and the occupation, the vast majority of the nation is morally sound, and full of plans for the future in which most of us believe.—*Home Service*

We Came to England

By LILI KOWALSKA

THIRTEEN years ago, in November 1939, my husband, my daughter, and I came to England as refugees from Poland. Today, I feel as if all that happened before I lived here had happened in another life or to another person. Perhaps, in a way, this is so. Of course, people change and the 'I' of yesterday is not the 'I' of today, but in my case and that of others who shared the same experience, one person came to an end in 1939 and another person began. Not only because we are older but also because we have absorbed a new nationality; and that means something very radical has happened to us. Yet, when I say that, I have to stop and think: because *have* we really been absorbed? How far can one be absorbed by a new country? That is what I want to talk about now: what that change means to me and how I discovered that I had changed.

Nationality is not simply a matter of passports and papers and oaths of allegiance, or even of language. It is the accumulation of memories, not only personal but racial, the tradition of living, manners, jokes, the feel of the countryside, and the noises of towns. It makes up a large, almost unconscious, part of our personality—our reactions of pleasure and pain, reactions to what we see or to what people do. In taking on another nationality these reactions are changed, and, with them, some of one's most intimate feelings and associations. But can this be done?

England has a powerful influence. This seems strange, because I cannot imagine another country where one could live with so little

interference from others. Yet, all the time, the influence is there. It is in the quiet voices of people in buses and undergrounds, making the excitedly talking foreigner drop his voice, unconsciously trying to adapt his ways to his surroundings. It is in the polite way in which you are treated when you have dealings with the authorities, at the police station, or the food office. Abroad, officials make you feel that you are a nuisance, a necessary evil. At first I was staggered by British officials. I am sure they themselves do not realise how much the newly arrived foreigner is impressed by their quietness and courtesy.

When we came here after the outbreak of war, I was dead inside. Outside, I suppose, I seemed normal enough, but I could not feel anything. We had not wanted to leave, but once we were outside Warsaw we were swept on. Though we tried to find it, there was no way back. We had left without taking anything with us—even the spare wheel of our car had been left behind—and we had to buy what we needed on the way.

Although this whole nightmare is now so far away, there were sights I shall never forget, which, when I came here, were uppermost in my mind. One evening at dusk, in a burning town where the bombing had just stopped, I noticed a lorry heaped high with what seemed to be sacks full of something. I asked a soldier standing near it what he had there. They were children, asleep. Lying on top of each other, none of them moved. In the morning they had been waiting to be evacuated at a station which was bombed. So the soldiers, trying to

save them, had loaded them on a lorry and here they were, 200 miles away from their native town. Often I have wondered what happened to those children in the end. There was no way back for them, either.

There was no way back for us, so once in England we settled down to live again. Many refugees I knew wanted to have their own things about them as soon as possible. They worked and lived for this—to have, once more, a home with things of their own. I did not. It took me many years to outgrow the feeling that I did not want to possess anything any more. The idea hurt me. I remember one thing, for instance, that stuck in my mind like a thorn—not exactly painful but always irritating—the memory of my plants.

Flowers in Warsaw

At home I used to grow plants indoors: some of them I had seen grow over many years, small cuttings into large plants. I had about 150 pots of greenery and I was very proud of them. Some flowered even in the Polish winter, and they gave me the greatest pleasure. African violets, billbergias, and even orchids grew on my window sills. One would have thought that the first thing I would do here would be to buy some plants to make me feel at home again. But when I thought of my plants dying there in Warsaw, one by one—the cacti would be the last—I hated the thought of ever growing anything again. When somebody gave me a plant, I let it die after it had flowered.

I did not want to own anything any more. I was glad we lived in somebody else's flat with furniture which was not mine, pleasant enough not to irritate me, but which I had not chosen and for which I had no personal feeling.

Then, about three years ago, I began to grow plants once more. Perhaps that was when I became British. In fact—and perhaps it is not quite a coincidence—we became naturalised at the same time. I put on my new nationality like a cloak. I had acquired the right to wear it and it gave me a feeling of warmth and security. I knew I would always be loyal to my new country and wear my cloak proudly. Then, one day, I noticed that the cloak had turned into a skin. A skin that hurt when it was pricked. It happened quite recently. We had a friend here from abroad. It was his first visit to this country and, though he admired much, he criticised a lot. Now we, too, often grumble (it shows how British we have become) but then we found out that when the grumbling came from an outsider we were cross; very cross indeed. We turned terribly British, defending anything and everything, and considered him, a man from our own country, as *you* must often consider us, a tactless foreigner.

One day we took him to St. James's Palace and showed him the Guards in their red coats. We proudly pointed out the beauty of the uniform and the tallness of the young soldier, as he marched up and down. When turning, he always made the few hurried little steps which belong to the whole ritual of being on guard. This seemed funny to our friend and he laughed. Afterwards I wondered; why had we been so terribly cross? Perhaps once it had seemed strange to us, too. I tried to remember the moment when we had crossed the invisible line between foreign-ness and British-ness, the moment when things became so natural to us that we did not notice them any more but took them for granted. Yet often when I am amongst British people, I feel a stranger. Not foreign but strange. I go back again to No-man's land. Though I understand the people around me, I do not quite feel one of them. I realise that I have to content myself with this. There will always be areas here where I shall stand outside, looking over the fence.

Many of the occasions which make one feel an outsider are those which clash with that part of one's personality which nationality produces—associations, habits, and traditions which one has grown up with. And, as you might expect, these occasions are not only where principles are concerned, but often small ones where personal feelings are involved. For instance, I cannot get used to the idea of sending a child of seven to boarding school. It seems terrible to me. On the continent children are kept with the family while they are very young. But perhaps, I say to myself, it is right to send children away, to produce a race of pioneers, able to fend for themselves under any condition. Then my pet aversion: routine. *Why* must washday be on Monday, I ask? *Why* have shops to close down at 5 or 5.30? They might prefer to stay open longer to give people a chance of shopping after their work. *Why*—this is one of the most puzzling questions to me—do people have a special meal for each day of the week? I remember a girl who said: 'Ah, today it's Wednesday; they're having rabbit for lunch at home'. The next day: 'Thursday, today they're having meat pie'. When I asked her: 'Might the order not be reversed

for once? Meat pie on a Wednesday and rabbit on a Thursday?', she looked at me as if I had turned into a female Guy Fawkes. Here is a fundamental difference springing from the very roots of nationality.

But this feeling of being outside has its advantages, too. There are things which thrill me and which I shall never take for granted as I would if I were British-born. There is, for instance, the honesty. People here are fundamentally honest. Where else could a news vendor leave his papers under a stone and go for his cup of tea, knowing that people would pay their pennies in his absence?

Another particularly British virtue is the capacity for saying the right word at the right moment. This sort of kindness often helps to bridge our loneliness—for those of us who were born somewhere else suffer a special kind of loneliness and will go on suffering to the ends of our lives. When we think of our native countries, we do not think only with the brain but with emotions and senses as well. Somebody said: 'Home is not where you want to live, but where you want to die'. The more I think of it, the more I see how true it is. This nostalgia is the link between the person I am now and the person who came here in 1939.

A Polish friend of mine, living in the United States, told me the other day of an incident which seems very characteristic to me. A friend of her youth, who has become one of the greatest conductors in the U.S.A., gave a concert in Chicago. Afterwards, the public went wild and she went in to him to congratulate him. She found him sitting at the table, his head buried in his hands. 'Arthur', she said, 'it was absolutely wonderful. People are still clapping and shouting like mad'. But he only moaned. 'What is it?' she asked. 'What's wrong?' He shook his head and repeated like a child: 'I want to be in Lwow—I want to be in Lwow'.

When she told us the story, all of us who listened had a lump in the throat. There is a 'Lwow' for every one of us, some place we see through a golden haze, for which we long with all our hearts, to which we go back in our dreams. However, I like to think in positive terms, and I believe that all our longing and suffering is not in vain. There is a kind of alchemy which can turn frustration and suffering into increased awareness and enjoyment of spiritual values. As a poet said:

Whence cometh the Light? Neither from the North nor
from the East, nor from the West; but from within,
to illumine all lands.

—Home Service

The Rokeby Venus

Life pours out images, the accidental
At once deleted when the purging mind
Detects their resonance as inessential:
Yet these may leave some fruitful trace behind.

Thus on this painted mirror is projected
The shield that rendered safe the Gorgon's head.
A travesty.—Yet even as reflected
The young face seems to strike us, if not dead,

At least into an instantaneous winter
Which life and reason can do nothing with,
Freezing the watcher and the painting into
A single immobility of myth.

But underneath the pigments' changeless weather
The artist only wanted to devise
A posture that could show him, all together,
Face, shoulders, waist, delectable smooth thighs.

So with the faulty image as a start
We come at length to analyse and name
The luminous-darkness in the depths of art:
The timelessness that holds us is the same

As that of the transcendent sexual glance,
And art grows brilliant in the light it sheds,
Direct or not, on the inhabitants
Of our imaginations and our beds.

ROBERT CONQUEST

The Listener

What They Are Saying

Christmas à la mode behind the Iron Curtain

All communications should be addressed to the Editor of THE LISTENER, Broadcasting House, London, W.1. The articles in THE LISTENER consist mainly of the scripts (in whole or part) of broadcast talks. Original contributions are not invited, with the exception of poems and short stories up to 3,000 words, which should be accompanied by stamped and addressed envelopes. The reproductions of talks do not necessarily correspond verbatim with the broadcast scripts. Yearly subscription rates (including postage): inland and overseas, £1. Shorter periods, pro rata. Postage for single copies of this number: inland and overseas, 1½d. Subscriptions should be sent to the B.B.C. Publications Offices, 35 Marylebone High Street, London, W.1, or any newsagent.

'Post-Christian' Era?

I HOPE you aren't going to defend that worn-out-platitude', wrote Arnold Bennett to Wells, 'to the effect that religion is a necessity of man's nature. Because it isn't. Religion is done for—any sort of religion'. That was in 1905. Nearly fifty years later Professor Arnold Toynbee in the course of his first Reith Lecture speaks of our western community as being a 'post-Christian' society.

When (he says) we look into our religious history in the west over the past 250 years, we cannot, I think, fail to see that we too [i.e. as well as the Russians under their rulers] have been drifting further and further away from our western Christian tradition. We may not have admitted this to ourselves and we have not thrown over the outward forms and observances but, if we look into our hearts, we shall see how far we too have moved away from our Christian past.

Today we celebrate the greatest festival of the Christian year. Today the churches will be almost as full as the shops have been over the past month; we shall join in the traditional prayers, we shall sing the traditional hymns; and after that we shall eat the traditional dinner. For the rest of the day we shall enjoy ourselves each in our own way but all in the atmosphere of the Christmas spirit—not forgetting the children. If then religion is done for and we have moved away from our Christian past, is Christmas in England today no more than a shopkeepers' peak season, rounded off with outward forms and observances that bear no relation to the life we lead during the rest of the year?

That religion is 'done for—any sort of religion' is of course absurd, as is the suggestion that 'religion is a necessity of man's nature' amounts to no more than a worn out platitude. One has only to look round the world to observe that religion, in the sense of man's propensity to worship, is as much alive as ever it was. The 'god' worshipped may take a variety of forms—an idea, an idol, the state, science, even in its laziest form a business or profession. All these and many more besides, functioning as a god, demonstrate the movement away from Christianity not into irreligion but into an alternative form of religion. 'The retreat from Christianity into irreligion', writes Dr. Casserley in his recently published Maurice Lectures*, 'does no more than create a spiritual vacuum, but the retreat from Christianity into religion may do something far more terrible and menacing to the future of mankind: it may fill that vacuum, fill it with reborn superstitions and mythologies, giving new life to the paganisms and idolatries, so recklessly sacrificial of human life and energy, from which the gospel once delivered us, and may now have to deliver us over again'.

The book referred to—we commend it to our readers—demonstrates the dangers to our civilisation, as the above quotation shows, not of irreligion (which, human nature being what it is, can never be more than a passing phase) but of bad religion, which is today the real challenge to Christianity because it offers men the so-called 'consolations of religion' upon much easier terms than a Christianity that is approximately true to itself can even contemplate. To the suggestion made in various quarters that so far from having retreated from Christianity we have advanced beyond it, the author—and many will agree with him—returns an uncompromising, indeed a scornful answer, in that while other ages have fallen short of Christianity with an honest profession of failure, ours has not acknowledged its failure at all but has claimed our retreat as an advance! This surely is a thought that, as we celebrate the birth of Him who gave to the world a gospel penetrating in its moral, intellectual, and social categories to the very heart of the human situation, we may all of us do well to ponder.

* *The Retreat from Christianity*. By J. V. Langmead Casserley. Longmans. 12s. 6d.

COMMENTATORS EAST OF the Iron Curtain have had little to say about the approach of Christmas. Indeed, in conformity with communist anti-religious propaganda, Christmas has been renamed the 'winter holiday' in Rumania and some other satellite states, and the Christmas tree the 'winter tree'. As an example of the Christmas spirit in which children in Rumania will spend the holidays, the following extract from the youth paper, *Scanteia Tineretului*, may be quoted:

Pioneer instructors have a great role for the success of the organisation of the winter vacation . . . and they must not forget for an instant the educational and political content of work during the vacation . . . Instructors can organise visits to factories, plants, state and collective farms, etc. Special attention must be given to the organisation of literary evenings, and meetings with Stakhanovites and scientists . . . The Union of Working Youth committees . . . must permanently check the manner in which the working plans for Pioneer detachments are fulfilled during the winter vacation.

Aware that this might be a somewhat heavy schedule for the Christmas holidays of children from nine years of age upwards, the paper added:

Pioneer instructors must not carry out too much activity to the detriment of rest.

A recent broadcast from Prague on Christmas shopping spoke of the abundance of suitable home-produced gifts, but said that there would be less eggs, butter and milk available. It added: 'We must not forget the economic loss and damage caused by the anti-state centre led by Slansky'. The Slansky group is, in fact, being made the convenient scapegoat for all economic difficulties. On December 16, Prague radio broadcast a recording of the opening speech at the Czechoslovak Party Congress delivered by Gottwald, in which he stated, among other things, that because of the damage done by the accused, 'we shall fail to reach the production plans fixed by the five-year plan for almost all basic raw materials'; and, in general, 'it will take us a long time to overcome the results of the damage they caused'. He went on to describe as 'counter-revolutionary drivel' the assertion that the Government and party intended to reduce the capacity of light industry below what was needed to meet internal consumer demands in full. Workers in these industries 'must turn out sufficient quantities of such goods as do not require many raw materials, or much power and labour, but whose scarcity unnecessarily embitters the lives of our women folk'. On the new party statutes, Gottwald declared:

It is a party member's duty to inform the leading bodies of the party, even up to the central committee, of any shortcomings noted, regardless of the individuals involved.

The need for supervision of all party members and eternal vigilance against enemies was stressed again and again, as was Gottwald's assertion that the conspiracy centring on Slansky had been only partly suppressed; and therefore the purge must go on. A Prague broadcast quoting *Rude Pravo* stated:

Our party and Republic is happy to be led by the true son of the people, Stalin's pupil—Comrade Gottwald . . . We Communists lead the people in their struggle for a better and more beautiful tomorrow. We do not expect sunny days, but days of fresh, hard struggles.

Prague radio, like the other satellite radios, gave tremendous publicity to the Vienna 'peace' congress. According to Moscow radio, 'journalists of the "free press" have been forbidden to report in any way about the congress'. Jean-Paul Sartre's speech was described by Budapest radio as representing 'a firm stand' taken by one who had 'covered a long road before reaching the people's peace congress' and had 'often caused violent controversies and protests among the progressive masses'. (Sartre has frequently been attacked in communist broadcasts.) Prague radio broadcast a comment by Kabourek calling on all Christians to support the congress. From the United States, the *New York Herald Tribune* was quoted for an article on the congress concluding with these words:

The theme, in essence, is disarmament of everyone except Russia and its satellites, and peace for everyone on Russia's terms.

In the communist world, Stalin's birthday (on December 21) now takes precedence over the birth of Christ, and in his weekly church commentary broadcast by Berlin radio, Willy Leissner claimed that Stalin's birthday would 'move the minds' of many peaceful people beyond the confines of the U.S.S.R., including many Christians.

Did You Hear That?

THE WOODS AT CHRISTMAS TIME

'SOMEBODY ONCE SAID that nature in winter is like a toy shop at night', said JOHN HILLABY in a talk in the Home Service. 'It is a vast storehouse of interesting things, but the doors are locked and the windows are hard to see through. If we want to get a glimpse of what might be called the life process in slow motion, now is the time it should be done.'

'You will be able to sense what I mean if you walk through a wood. Choose some quiet paths. Walk as far as you can and then stop and

remain there until you are no longer a noisy intruder. The first thing which should impress you is that everything seems to be in a state of suspense. It is silent and sleepy. You can sense it best, I think, in that kind of sour-sweet fungal smell which seeps out of the wet earth. You can feel it, too, in the air which daily becomes less kind. But it is in the sound—or rather I should say in the absence of sound—that a wood in winter becomes such an "unnatural" place: a huge hall of exaggerated silence.

'Imagine yourself in such a place now: a beech wood, say, in Hampshire or Sussex, or in one of those mixed woods which seem to cling to the grit and limestone ribs of the Yorkshire Pennines. What do you hear?

Nothing at all for a minute or two. And then dry twigs rubbing together in a little wind. Perhaps a muffled "pop" as a squirrel drops an acorn or a fir tree sheds a cone. Those cheerful little winter birds, the tits, will undoubtedly add a few notes here and there, and robins and wrens both emphasise the silence with their reedy, silver songs. The most surprising noise in a wood at this time of the year usually comes from wood pigeons which positively clatter into the tops of trees with a great flapping of wings. But the rest is silence.

Insects and plants which die achieve immortality for their race by an egg under the bark of a tree here or there, or a seed in the ground. Some insects "over winter", as entomologists call it. And bark, again, is a favourite hiding place: if you pull off a strip from a stump of an elm you will often find large congregations of ladybirds underneath, thirty or forty or more, all huddled together; and perhaps a queen wasp and some spiders. Toads dig themselves into a hole backwards with their feet. They get beneath the surface of the ground and slip away into a coma from which nothing will wake them except the return of the sun. The small mammals eat and eat, become sleek, and then hole up again until the earth grows warm.

'This business of hibernation is still very much of a mystery even to the scientists. They have learned a good deal about it, certainly. Dormice have dozed through December quite unaware, I presume, that they have been sleeping on the top of pumps and delicate, self-recording thermometers which show that their metabolism, or living rate, is only a few units away from death. They have one or two heart beats every minute and a few breaths every hour. There is no external growing, no moving, no eating, no excreting. They just doze

through the silence. And yet if you dig the creatures up they are warm. They are alive, just as certain seeds can be shown to be alive by placing them in water and watching the little bubbles form round the germ cell.

'There is a solid biological explanation for hibernation, migration, the retreat of the sap, and so on. In most cases, it is the lowering sun. It caused the dormouse to hole up with his tail round his body; it brought the wasps out of their nests and the leaves off the trees. We are all sun dependent. The hibernation of the dormouse may be as near to

death as an animal can go, but for many things in the worldly storehouse the winter season is death. The time has come for them to go. They simply die. They are not able to hole up in the ground or slide under the protecting blanket of tree bark. Their days are determined by the length of a shadow at midday.

'At the time of the winter solstice the ancients said the great sun god, Mithras, stirred within the rock and came out on Christmas Day, three days after the darkest day of the year. To the ancient Angles it was the festival of Modranecht, or Mother Night. They lit fires and blew horns for, at last, the Old Evil of darkness was being overpowered by the light. It was the time when Baldur was slain with the mistletoe.

A forgotten mythos, if you like, but might not some of us actually have some mistletoe hanging over the door? In this way we perpetuate the hope for spring in the green tree, that is to say in the spruce, the holly, and the mistletoe'.



A woodland scene in winter

J. Allan Cash

WATER LEAKS AND ISOTOPES

At Preston, near Lavenham, in Suffolk, a party of scientists from Harwell recently carried out an experiment illustrating one of the many peaceful uses of atomic energy. Some small leaks had been made in a 400-yard stretch of buried water pipe, and the scientists discovered them in a matter of minutes.

One of the scientists, Mr. Sidney Jefferson, explained to VALENTINE SELSEY, a B.B.C. reporter (as he related in 'Radio Newsreel'), how 'they had walked over the buried pipeline with their geiger counters. They knew that the pipeline had been filled with water containing radio-active sodium; they knew that there were nine joints in the pipe and that an unspecified number of these had been deliberately loosened to let out the water; they knew also that after half an hour the main bulk of the water inside the pipe had been pumped out, leaving only the radio-active water, which had seeped out into the surrounding earth.

'The geiger counters', Valentine Selsey continued, 'had shown no reaction until the scientists had reached the third joint. There radio-active water was discovered, and leak number one traced. Altogether two joints were found to have let out the water—two out of the nine. In this way, these Harwell scientists were able, in the course of one morning, to locate faults in this 400-yard stretch of pipeline. The experiment, Mr. Jefferson told me, had been 100 per cent. successful.'

'This is another example of the use of radio-active isotopes to track down faults. They have been used, for instance, to find out where water seeping into a coal-mine is coming from; they have been used to test ventilation and heating systems; but this is the first time the method has been used to find leaks in water pipes. In this experiment in Suffolk, the District Resident Engineer was responsible for the idea. The Isotopes Division at Harwell carried it out. The radio-active mixture used was weak and harmless. The stretch of pipeline is still under construction, and will not be used to carry a public water supply for some months'.

SINGING TO THE FISH

Two Scottish fishing boats, complete with Scottish crews, have just arrived in Malaya to seek out new fishing grounds and give the Malaysians an idea of the latest fishing methods. There are three main sources of fish in Malaya: the coastal waters, the paddy-fields, and the fish ponds. Off the coast there are herring-like fish which behave very much as herrings do in British waters, and that is one of the reasons why the Scottish fishing boats have gone there. DERYEK W. LE MARE, the Director of Fisheries in Malaya and Singapore who is on a visit to this country, gave this picture of Malayan fishing practices in 'The Eye-witness':

'When the shoals are running, dozens of small boats put out from the fishing villages with nets and lines, and when the fleets reach the fishing grounds, the head fishermen of the net boats dive over the side to listen for the shoals. Sometimes, the approaching shoals produce a noise like the croaking of frogs in a garden, and the bigger ones sound like a squadron of bombers in the distance. The divers can hear the large shoals as much as 200 yards away, and immediately these "ears"

of the fishing fleet pick up the sounds of the shoals, the boats converge on them and down go the nets.

'I have been talking about the Seine nets, the sort of net used to surround a shoal and then drag it aboard or ashore. Lift nets, too, are used. The fishermen lower their nets where they know there are some fish, and then they lure the shoals over them. Another method is for fishermen to anchor bundles of coco-nut leaves in the fishing grounds. Sometimes hundreds of them are lowered just under the surface. The coastal waters where this net is used are fairly clear, and when a fisherman sees one of these shoals congregated round a bunch of leaves, he lowers another bunch from his boat and gently rows away with it. The moving bunch seems to exert some fascination on the fish, for they promptly follow, and in this way they are gradually led over a net which, at just the right moment, is lifted at each corner to form a trap. In this way you can catch anything up to two tons of fish at any one haul.

'Fish is of primary importance to the people of Malaya. There are a number of different religions in the peninsula—some cannot touch beef, others must not eat pork, and so on, but there is nothing against eating fish.

'The British Government is spending a great deal of money on developing the fishing industry: for example, it is spending more than £500,000 on two schemes, the establishing of two research laboratories. And, on the whole, our efforts are proving fairly successful. For instance, a matter of six years ago the total fish production was only 45,000 tons annually; today it is 182,000 tons, and it is still going up.

'Fishing in Malaya can be leisurely; it can also be almost excessively noisy, for in some forms of deep-sea fishing the Malays rattle coco-nut shells over the side of the boat, put their paddles into the water and

beat them to produce a sort of booming sound, and they sing to a rhythm that you can hear floating across the waters from miles away'.

NEW LIGHT ON MEDIEVAL HATS

'The nave of the little church of St. James at Stoke Orchard, a village which lies between Cheltenham and Tewkesbury', said E. CLIVE ROUSE in 'Midlands Miscellany', 'has remained almost unaltered since about 1150. The only intrusions, apart from Tudor seats, a Jacobean pulpit, and a plaster ceiling dated 1723, are a sixteenth-century window, and a fearsome heating stove which fits into the medieval atmosphere by giving a lifelike imitation of the Mouth of Hell, with its belching smoke and fumes.

'For some time past, indications of colour had been noticed on the walls where limewash had flaked off. Three years ago I was invited to inspect the church; and as a result of my tests, it was decided to uncover whatever paintings there might be. I began the work in the early autumn, and the results so far have been of considerable interest, though the paintings are disappointingly fragmentary. The walls show an almost continuous sequence of paintings, covering roughly the 500 years from about 1200 to 1700, or later. When one set of paintings

became dilapidated, or alterations necessitated a change, a new set or subject was superimposed. At the Reformation, when sacred imagery was deemed Popish or superstitious, the remnants of the medieval artists' work was obliterated with whitewash, and texts in elaborate frames were substituted. These in turn became defective and were replaced by other texts until, in places, as many as five layers of superimposed paintings had accumulated, and all more or less fragmentary.

'My task now is to sort out these paintings and preserve the most interesting subjects, be-

sides consolidating the plaster and making a record. Wherever possible the paintings are uncovered layer by layer and recorded by photography.

'The church seems to have had a complete scheme of painting dating from about 1200: the walls were divided into three zones by horizontal scroll bands; there were figure subjects extending completely round the church in the middle zone, including the window splays, and more subject matter in part of the top zone.

'The scenes are very imperfect, and it has not yet been possible to identify many of the subjects, beyond the fact that an extensive life of a saintly bishop (perhaps St. Nicholas), and probably another series is represented. On the south wall is an engaging scene where devils are trundling a hand-cart, doubtless filled with damned souls on their way to Hell. This is clearly part of a Doom or Last Judgment. Below is a baffling scene which I can only describe as a bishop being dive-bombed by a pack of demons; its true interpretation will no doubt emerge in due course. The work is crude and coarse, though vigorous.

'A feature of the figure subjects is the great variety of hats. Hats were important in medieval wall-painting as marks of easy recognition for simple, unlettered folk. Prophets or figures of high antiquity were given a kind of beret or turban. Jews had as a rule a tall, pointed hat. There is a group of four wearing them at Stoke Orchard. And there is an endless variety of crowns, coronets, tiaras, and mitres to denote rank and position. Hands are also important, and the wealth of gesture at Stoke Orchard gives many clues to the conventional sign language of attitude and gesture used in all these church wall paintings. Judgment was recognised by the open palm, condemnation by the pointing finger, admonition or speech by the curved finger, power by two fingers, and so on'.



Malayan fishermen lifting their nets

The Reith Lectures—VI

The World and the Greeks and Romans

ARNOLD TOYNBEE concludes the series on 'The World and the West'

THE story of the world's encounter with the Greeks and Romans is, I think, enlightening for us because it takes us out of ourselves. After all, one of the besetting infirmities of living creatures is self-centredness, as we all know from personal experience, and this has the dangerous effect of making us lose our sense of proportion. Every soul, tribe, and sect believes itself to be a chosen vessel; and the falsity of our belief in our own unique value does not easily become apparent to us. We can see the fallacy readily, though, when it is a case of somebody else hugging this illusion about himself. We westerners, being human, are inclined to feel that what we have done to the world within the past few centuries is something unprecedented. An effective cure for this western illusion of ours is to glance back at what, not so very long ago, was done to the world by the Greeks and Romans. We shall find that they, too, overran the world in their day, and that they, too, believed for a time that they were not as other men are. We shall also find, before we come to the end of this story of the world's encounter with the Greeks and Romans, that, in this episode, a temporarily dominant Graeco-Roman society's estimate of its own achievement broke down under the test of being weighed in the truth-finding balance of history.

Expansion of the Greek World Overland

The expansion of the west over the world which began with our dramatically sudden conquest of the oceans at the end of the fifteenth century has its counterpart in Graeco-Roman history in the expansion of the Greek world overland in and after the generation of Alexander the Great in the fourth century B.C. Alexander's march across Asia from the Dardanelles to the Panjab made as revolutionary a change in the balance of power in the world as the voyages of Da Gama and Columbus; and, like these, it was followed up by wider conquests in later generations. In the second century B.C. the Greeks conquered India right across to Bengal, and in the same century the Romans won for the Graeco-Roman world a frontage on the Atlantic Ocean in what are now southern Spain and Portugal. The basic Greek in which the New Testament was written in the first century of the Christian era was spoken and understood from Ceylon and the southern tip of India to the hinterland of Marseilles. At the same date, Britain was being annexed to the Graeco-Roman world by force of Roman arms, while Greek art in the service of an Indian religion—Buddhism—was travelling peacefully north-eastwards from Afghanistan along a road that was eventually to carry it across China and down Korea to Japan. You will see that, in sheer physical range, the Graeco-Roman culture, in its day, spread as widely in the Old World as our western culture has spread in our day; and, in an age which had not yet seen the emergence of the native civilisations of the Americas, the Greeks could boast, as we can today, that every contemporary civilisation on the face of the planet (whose shape and size the Greeks had accurately calculated) had been reached and penetrated by the radiation of their world-conquering culture.

This impact of a Greek culture on the world in and after the fourth century B.C. gave the world as sharp a shock as the impact of our modern western culture has been giving it since the fifteenth century of our era; and, as human nature has not undergone any perceptible change within the past few thousand years, it is not surprising to find the standard alternative psychological reactions to a cultural assault, which we have observed in the history of the world's encounter with ourselves, making their appearance likewise in the history of the world's earlier encounter with the Greeks and Romans.

This passage of history, too, can muster its intransigent mahdis and its adaptable Peter the Greats. In Peter's line, for example, there was Mithradates the Great, an Iranian king in Asia Minor, who very nearly got the better of the Romans by arming and drilling his troops in the Greek and Roman style and by taking the field against Rome as a rival patron and champion of the Greeks and their culture. And there was Herod the Great, the Edomite King of Judaea, who was worsted by one of those impossible tasks that are set to people in fairy stories.

Herod's self-assigned mission was to educate his stiff-necked Palestinian Jewish subjects into acquiescing in the minimum compromises with Greek civilisation and with Roman power which, for a small oriental people in a predominantly Graeco-Roman world, were the only practical alternatives to the desperate course of provoking and incurring annihilation. The Herodian policy of prudent accommodation to imperious historical facts was defeated by the obstinacy of a long line of Palestinian Jewish mahdis. This militant movement had begun in the second century B.C. in a fierce revolt against the Hellenising policy of a Greek king of south-west Asia. Re-read the first and second books of Maccabees, and you will, I think, be struck by the family likeness between the Maccabees' insurrection in Palestine in 166-5 B.C. and the Mahdi Muhammad Ahmad's insurrection in the Egyptian Sudan in A.D. 1881. After flickering up again in the insurrections of a Theudas and a Judas whose signal failures are cited by Gamaliel in the Acts of the Apostles, the flame of this fanatical Palestinian Jewish resistance to Hellenism rose to its final flare in the second century of the Christian era in the revolt of Bar Kokaba, who proclaimed himself the Messiah and was crushed by the Roman Emperor Hadrian.

These Palestinian Jewish leaders of an oriental resistance movement to the Graeco-Roman civilisation were not the only representatives of their kind. Already before the end of the third century B.C. there had been something like an 'Indian Mutiny' among native Egyptian troops who had been armed and drilled in the Greek style by a Greek King of Egypt for the defence of his dominions against an invasion by a south-west Asian Greek contemporary of his. The Greek-drilled Egyptians routed the full-blooded Greek troops in the invading army; and their astonishing victory over descendants of Alexander's invincible soldiers went to these native Egyptian soldiers' heads. And then there were outbreaks among the most ill-fated of all the orientals who had fallen under Greek or Roman rule—the Syrians who had been kidnapped and been deported overseas to work as slaves in chain-gangs on Greek plantations in Sicily. Before the end of the second century B.C. these Syrian slaves in Sicily had made two desperate insurrections against their Greek masters' Roman protectors.

A Grim Tale

This grim tale of cruel oppression and savage revolt in the earlier chapters of the history of the world's encounter with the Greeks and Romans has found echoes in familiar chapters of the parallel history of the world's encounter with the west. In a westernised world the slave-trade, that once disgraced the Mediterranean has been revived in the Atlantic; the insurrection of plantation slaves that was crushed in Sicily has been victorious in Haiti; the mutiny of the Ptolemies' Greek-drilled native Egyptian troops has been matched by the mutiny of a British East India Company's western-drilled sepoy; and militant oriental resistance movements against an alien ascendancy that are reminiscent of the unsuccessful anti-Hellenic insurrections of the Palestinian Jews and the successful anti-Hellenic insurrections of the contemporary Iranian peoples, are in full swing at this moment in Indo-China and Malaya and are threatening to break out in three places in Africa. Up to this point, we can read the story in our own record without needing to consult the Greeks' and Romans' dossier. But now we are reaching and passing the point where, on the open page of our book, the moving finger is writing the latest entries in our still unclosed account; and, beyond this point, where the curtain veils our own future, the Graeco-Roman account is our best source of potential information about what may be in store for us.

I am not meaning to suggest that we can cast a horoscope of our own future by observing what happened in Graeco-Roman history beyond this point where our own record breaks off, and then mechanically translating this Graeco-Roman record into modern western terms. History does not automatically repeat itself; and the most that any Graeco-Roman oracle can do for us is to reveal one among a number of alternative possible future *dénouements* of our own drama. In our case the chances may well be against the plot's working out to its Graeco-Roman

conclusion. It is conceivable that we westerners and our non-western contemporaries may give the course of our encounter with each other some quite different turn which has no counterpart in Graeco-Roman history. In peering into the future we are fumbling in the dark, and we must be on our guard against imagining that we can map out the hidden road ahead. All the same, it would be foolish not to make the most of any glimmer of light that hovers before our eyes; and the light reflected upon our future by the mirror of past Graeco-Roman history is at any rate the most illuminating gleam that is visible to us.

Peace from the Ganges to the Tyne

With these counsels of caution in our minds, let us now go on turning the pages of the book of Graeco-Roman history till we come to the picture of the Graeco-Roman world half-way through the second century after Christ. When we compare this with the picture of the same world 200 years earlier, we shall perceive at once that, in the interval, there has been a change for the better here which unfortunately has had no parallel in our western history, up to date. In the last century B.C. the Graeco-Roman world had been racked by revolutions, wars and rumours of wars, and had been seething with tumult and violence quite as feverishly as our western world is today; but, midway through the second century after Christ, we find peace reigning from the Ganges to the Tyne. The whole of this vast area, stretching from India to Britain, through which the Graeco-Roman civilisation has been propagated by force of arms, is now divided between no more than three states, and these three are managing to live side by side with a minimum of friction. The Roman Empire round the shores of the Mediterranean, the Parthian Empire in Iraq and Iran, and the Kushan Empire in central Asia, Afghanistan, and Hindustan, cover the whole of the Graeco-Roman world between them; and, though the makers and masters of these three empires are all non-Greek in origin, they are nevertheless all 'Phil-hellenes', as they are proud to call themselves: that is to say, they consider it to be their duty and their privilege to foster the Greek form of culture and to cherish the self-governing municipalities in which this Greek way of life is being kept alive.

Let us look into the hearts and minds of the millions of Greeks and Romans and the many more millions of Hellenised and semi-Hellenised ex-orientals and ex-barbarians who are living under the shelter of a second-century Roman-Parthian-Kushan peace. The waters of war and revolution which had gone over the souls of this generation's great-grandparents have now ebbed away, and the nightmare of that time of troubles has long since ceased to be a living memory. Social life has been stabilised by constructive statesmanship; and, though the settlement has fallen far short of the ideals of social justice, it is tolerable even for the peasantry and the proletariat, while for all classes it is indisputably preferable to the Ishmaelitic anarchy—every man's hand against every other man's—to which it has put a long overdue end. Life now is more secure than it was in the preceding age; but for this very reason it is also more dull. Like humane anaesthetists, these more or less beneficent autocrats, a Caesar and an Arsaces and a Kanishka, have taken the sting out of those once burning economic and political questions that, in a now already half-forgotten past, were the salt as well as the bane of human life. The benevolent action of efficient authoritarian governments has undesignedly created a spiritual vacuum in human souls.

Spiritual Vacuum

How is this spiritual vacuum going to be filled? That is the grand question in the Graeco-Roman world in the second century after Christ; but the sophisticated civil servants and philosophers are still unaware that any such question is on the agenda. The people who have read the signs of the times and have taken action in the light of these indications are the obscure missionaries of half a dozen oriental religions. In the long-drawn-out encounter between the world and the Greeks and Romans, these preachers of strange religions have gently stolen the initiative out of Greek and Roman hands—so gently that those hard hands have felt no touch and, so far, have taken no alarm. Yet, all the same, the tide has turned in the Greeks' and Romans' trial of strength with the world. The Graeco-Roman offensive has spent its force; a counter-offensive is on its way; but this counter-movement is not yet recognised for what it is, because it is being launched on a different plane. The offensive has been military, political, and economic; the counter-offensive is religious. This new religious movement has before it a prodigious future, as time is going to show. What are

the secrets of its coming success? There are three on which we can put our finger.

One factor that, in the second century after Christ, is favouring the rise and spread of the new religions is a weariness of the clash of cultures. We have watched the orientals responding to the challenge of an infectious Greek culture along two antithetical lines. There have been statesmen of Herod the Great's school whose prescription for living in a Graeco-Roman cultural climate has been to acclimatise oneself, and there have been fanatics whose prescription has been to ignore the change of climate and to go on behaving as though this change had not occurred. After an exhaustive trial of both these strategies, fanaticism has discredited itself by turning out to be disastrous, while the Herodian policy has discredited itself by turning out to be unsatisfying. Whichever of the two alternative strategies has been followed, this cultural warfare has led nowhere; and the moral of this anticlimax is that no single human culture can make good its conceited claim to be a spiritual talisman. Disillusioned minds and disappointed hearts are now ready for a gospel that will rise above these barren cultural claims and counter-claims. And here is the opportunity for a new society, in which there shall be neither Scythian nor Jew nor Greek, neither bond nor free, neither male nor female, but in which all shall be one in Christ Jesus—or in Mithras, Cybele, Isis, or one of the *bodhisattvas*, an Amitabha (the spirit of boundless light), or perhaps an Avalokita (the spirit of compassion).

An ideal of human fraternity that will overcome the clash of cultures is thus the first secret of the new religions' success, and the second secret is that these new societies which are open to all human beings, with no discrimination between cultures, classes or sexes, also bring their human members into a saving fellowship with a superhuman being; for the lesson that human nature without God's grace is not enough has by now been graven deep on the hearts of a generation that has seen the tragedy of a time of troubles followed by the irony of a world-wide peace.

Gods Who Have Been Found Wanting

At least two breeds of human gods have now been tried and been found wanting. The deified militarist has been a flagrant scandal. Alexander, as the Tyrrhenian pirate told him to his face in the story as we have it from Saint Augustine, would have been called not a god but a gangster if he had done what he did with a couple of accomplices instead of doing it with a whole army. And what about the deified policeman? Augustus, now, has made himself into a policeman by liquidating all his fellow gangsters, and we are grateful to him for that, but, when we are required to register our gratitude by worshipping this reformed gangster as a god, we cannot comply with much conviction or enthusiasm; and yet our hearts are hungry for a divinity that we can worship in spirit and in truth.

In the gods who have made their appearance in the new religions, we are at last in the presence of divinities to whom we can devote ourselves with all our heart and mind and strength. Mithras will lead us as our captain. Isis will nurse us as our mother. Christ has emptied Himself of His divine power and glory to become incarnate as a man and to suffer death upon the cross for our sake. And for our sake likewise a *bodhisattva* who has reached the threshold of Nirvana has refrained from taking the last step into bliss. This heroic path-finder has deliberately condemned himself to go on haunting the sorrowful treadmill of existence for aeons upon aeons more; and he has made this extreme sacrifice for the love of fellow sentient beings whose feet he can guide into the way of salvation as long as he pays the huge price of himself remaining sentient and suffering.

These were the appeals of the new religions to a majority of mankind who, in the Graeco-Roman world in the age of the imperial peace, were weary and heavy laden—as indeed they are at all times and places. But what about the Greek and Roman dominant minority that had devastated the world by conquering and plundering it, and were now patrolling the ruins as self-commissioned gendarmes? 'They make a desert and call it peace' is the verdict on their handiwork that one of their own men of letters has put into the mouth of one of their barbarian victims. How were sophisticated and cynical Greek and Roman masters of the world going to respond to the challenge of the world's counter-offensive on the religious plane which was the world's answer to its rulers' previous offensive on the plane of war and politics?

If we look into these Greek and Roman hearts in the generation

(continued on page 1074)

The Celestial Damsels of Khajrao

By FRANCIS WATSON

IFIRST met Raymond Burnier at a summer retreat on a pine-fringed saddle of hill that looked across to the majestic snowline of the central Himalaya—Nanda Devi, Nandi Kot, Trisul, and the rest. Both Burnier and Alain Daniélou, one Swiss, the other French, had freely chosen the Indian way of life—which can be very pleasant and comfortable; but I sometimes think of Alain as being more Hindu than a good many Hindus, whereas Raymond remains a cosmopolitan. Daniélou is a Sanskrit scholar, a rare expert in the theories of Indian music. He is one

who can sit down at any time by the wayside and discuss the Vedanta with some wandering ascetic, voyaging on strange seas of thought alone. He has much knowledge but is more concerned with wisdom, which I suppose he approaches intuitively. Raymond Burnier has unusual knowledge also, but he is a man of affairs, his own chosen affairs. He is a very able and sensitive photographer of Indian sculpture. He is immensely painstaking, as he has to be to get his results. For hunting Indian temple-carving with a camera has something in common with photographing wild life. To start with, you have to have a consuming passion for the pursuit. You must know the habitat of the species you are after, and some of the best

of it is deep in the jungle, or across roadless sands, or guarded by village people who flutter about the rare intruder like birds protecting their nestlings. You have to understand the weather, and the light. You must have good equipment and a great deal of patience. And you must love and feel the living wonder of the subject more than you love the pictures that you make of it.

Raymond Burnier has all these requirements. He does not exactly build a 'hide' like the nature photographer. But he does, when necessary, erect scaffolding for himself and his cameras. He will visit a site many times until he knows it thoroughly. And when at length the impulse to make pictures there has grown so strong in him that it can no longer be resisted, he organises his expedition down to the last detail, loads his station-wagon, and disappears for weeks at a time. Burnier and Daniélou live usually in an old palace on the waterfront at Benares. There they are at the heart of Hindu India. True, it is Islam that first salutes the glitter of morning with the pencil-minarets of Aurungzeb's mosque, but the steps and terraces and temple-platforms along the curve of the Ganges are all expressions of Hinduism and they make Benares what it is—unique among cities as Venice is unique. There is a saying that you should see the evening at Lucknow, but the morning at Benares. In the midst of that swarming life, at the water's edge, under the tilted broad umbrellas, in the narrow lanes that lead to the sacred river, there are innumerable private silences, the individual trance at the still centre of the vortex. And so it has been for perhaps a million

mornings. Burnier and Daniélou were infected—as who could not be?—by this endlessly renewed spiritual vitality. But their home, as I knew it briefly a few years ago, was free from that rather febrile earnestness which is sometimes the mark of the western convert to Theosophy. The atmosphere was singularly relaxed. And what I recall now is the lazy, easy hours when we sat in their balcony-room above the river and talked about Indian temples, while down below in the sunlight the prayers for the dead and the praise of the ever-living mingled rhythmically with the slapping of wet clothes on the ancient stones.

We were three Europeans with three different approaches to an art that seems to bear out the words of Lord Bacon: 'There is no excellent beauty that hath not some strangeness of proportion'. Daniélou had immersed himself in the excellent beauty and the strangeness, till the strangeness became the norm of existence and the beauty was no longer seen self-consciously, critically—aesthetically, if you like—but as though he himself were inside it all, so that it became visible only in the mirror of other people's attitudes. Burnier had the frank interest of a connoisseur, with fully established preferences and the ability to express them. I was simply a traveller, entranced by what I had seen, eagerly planning what I would see next, and feeling my way towards intellectual as well as sensual appreciation without the help of Sanskrit. The temples that we talked about were to me personal experiences: almost, I am rather ashamed to say, personal possessions;

I suppose because I had seen them alone, utterly alone, in a way that one can almost never be in visiting some western monument or work of art. I remembered a starlit night's journey in a bullock-cart along the Orissa coast that took me to the sun temple of Konarak; I remembered the priests at Khajrao, in Bundelkhand, who fed me and let me sleep on the platform of a temple—Khajrao, the group of temples which I have now seen again in Burnier's exhibition, at present touring Britain under the aegis of the Arts Council.

It must be because Indian sculpture is so Indian, whether it dates from 1000 B.C. or A.D. 1300—so instantly recognisable as Indian—that we are often disinclined to enquire further into distinctions of time and place and style and purpose. Even the different aspects of Buddhism and Hinduism (or Brahmanism) are not always readily discerned by the inexperienced, let alone the deviations of the Jainist cult. For one reason and another, the ideas of Indian sculpture that we get from western museums are chiefly derived from that millennium between the third century B.C. and the eighth century A.D.—all of it roughly called 'the Buddhist period'. The Buddhist Amaravati fragments in the British



Two of Raymond Burnier's photographs of the 'celestial damsels' ('Apsaras') on the temples at Khajrao



Museum, which used to adorn the main staircase and are now being rearranged, have been the Elgin Marbles of India. They tell the Buddhist stories with nimble grace, the figures exquisitely contrived in bas-relief within a series of medallions. To this narrative art we add the bewildering iconography of the Hindu pantheon with its multiplicity of incarnations, exploits, and limbs. All these, Buddhist and Hindu works alike, belong to the early, to what has been called the classical, period. Thus our notions are apt to be fixed before we can reach the great centuries—from the tenth to the thirteenth or fourteenth—in which the collective spirituality of India produced anonymous masterpieces of temple-building at the same time as Christian art reached its own flowering in the west.

It is convenient to call those centuries 'medieval'. But of course it is the differences rather than the parallels with our concepts that are important. The medieval period in India, for instance, was not monastic. It was early Buddhism that had produced monastic institutions, and to perpetuate them it had to travel to other lands. Again, Hindu temples were not built for public congregation and the assembly of many people in worship. Great gatherings and ceremonies could go on outside and around them at the appointed times of festival, as they still do. And in the south especially, spacious courts, pillared walks, bathing tanks and outbuildings enlarge the sacred site. But for the temple itself all that is needed is a dark and windowless shrine for the cult-image or for the Shiva-lingam, the central mystery, seen only by the flickering light of little saucer-lamps, and seen by a few or by only one worshipper at a time. The shrine needs an entrance-porch, and it grows a distinguishing tower on its own base. This is the simple structural plan which can develop organically, almost like a plant, into those wonderful groves of temples at Khajrao and Bhuvaneswar, with their tapering towers like great ribbed cacti, grey amongst the green. And like a plant also the temple puts forth its decoration, its lure, the outer surface sprouting into sculpture as though fed by an inner force in the dark heart of the organism.

That is one way of saying that in the Indian tradition, sculpture and architecture are one—as conscientious librarians find to their dismay when they try to classify books on the subject. It all starts—or what is left of it starts—in the caves cut in hillsides, the first of them in the early Buddhist period by the monks who wanted cells and assembly-halls and imitated in the living stone the wooden architecture that they knew. Side by side with these Buddhist caves at Ajanta and Ellora in western India lie the early rock-cut shrines of the Jains and of orthodox Hinduism. And then in the seventh century A.D., on the sea-coast near what is now Madras, another civilisation found masses of boulder lying ready for its sculptor-builders, who wrought entire monolithic temples out of them. The still later operation of building a temple, in the structural sense, was the operation of piecing together the sculptor's material instead of using it where it lay.

Fragmentary Splendour

What the medieval Indian sculptor made of that material is shown in Raymond Burnier's photographs in a fragmentary splendour. These single figures are the notes of the music. The orchestration has to be imagined. The ripples that run up and down and around a temple, in frieze upon frieze, are not something that the camera—at all events the still camera—can catch and convey. But there may be more in it than this. I rather think that Burnier's concentration upon the single figure—sometimes upon the head alone—establishes his eye as a western eye. The natural European approach to art seems to be through the individual masterpiece. I doubt if this is the best advance to a full appreciation of Indian art. But still, our eyes—the eyes of the spectators—are European eyes. And if that is the way in which we find it easiest to come to terms with something new to us, then the photographer is doing us a service. He shows us a gallery full of individual masterpieces: his own selection from the abundance that is to be found without going further than those two temple-groups of Khajrao and Bhuvaneswar.

In the earlier Indian sculpture there is a great richness of plant life, and animal life also, and it is not merely decorative, although certain decorative motifs become firmly established. The animals play their recognised part in Hindu mythology or Buddhist legend. The plants have their traditional, symbolic, and magical significance. But they are still birds and beasts and trees and flowers, portrayed with unmistakable love and pleasure, and above all with that feeling of kinship with all life which is distinctively Indian. Trees and flowers and the lotus-creeper—the latter being the Indian sculptor's invention—supply for centuries a great part of his vocabulary. And there is a certain gesture,

very old and very persistent, in which a female figure reaches up to touch a tree, or a creeper. It is seen again in the tenth century at Khajrao, and Burnier has photographed it. But in this medieval period it is as if the properties of growing things had been so completely assimilated as to reproduce their rhythms in whatever the sculptor attempted. The formal organic decorations have withered, or have undergone the sort of metamorphosis which would have restored Daphne and Syrinx to the kingdom of flesh and blood.

A Series of Blessed Damosels

Among the first pictures that Raymond Burnier brought back with him from Khajrao and its thirty temples was a series of those blessed damosels whose function, we are told, is to charm both gods and men. Their supple grace is undeniable, their gestures various but recurrent. One may be playing with a ball, another gazing at a curved mirror held in her hand, a third touching a fruit or a flower, all with a curious and subtle unconcern. One of them turns, touching her breast, to face the temple rather than the world outside. Others are in the rhythmic postures of a dance, and from the Adinath temple at Khajrao there is a pose of startling beauty—the right knee flexed so that the right hand touches the toe, the left arm bent high, continuing the movement above the curving torso.

Who and what are they? Daniélou, explorer of the Vedic texts, could have talked for an hour about each sinuous figure, each serene, absorbed countenance, disturbing with its large gaze, or else with eyelids closed upon its own and the temple's secret. He would have explained the dependence of every pose and placement upon the *yantra*, the linear diagram of the temple's yogic meaning. Burnier, the artist, responded more simply, to superb plastic achievement, and then concerned himself with the problems of communicating at least a hint of it—and not of the surface qualities alone. The most usual name for these slender and mysteriously seductive figures is 'Apsaras'. And significantly that word and the place and approximate date are all that the labels on the photographs supply. For although the metaphysics of these medieval temples is profound and endlessly suggestive, their iconography is relatively simple. In these temples, gods and goddesses, lesser deities, attendants, and even human beings are carved to the same scale and almost in the same manner, as though all partook of the same nature. The gods, in fact, are few, and installed as an act of sanctification. Their elaborate and many-limbed insignia need no longer be displayed everywhere in fierce or benign aspects, as they were in the earlier periods. All that language of Hinduism, one feels, has been learned and understood, and fully reasserted over the magnificent intrusion of Buddhism.

Nor is it any longer necessary to relate moral and mythological narratives in stone which every pilgrim knows by heart. The requirements of hieratic art may still be complex and exacting, but it is as if a leap forward has been made in the realm of ideas. It is a leap which, to the self-conscious spectator of today, whether European or Indian, may end in a blank wall of bewilderment. For most of us do not quite know what to make of the exact and candid element of eroticism which we perceive in the carved configurations. That convention was established in Indian art at least as early as the first century A.D. in the Karli caves; but at Khajrao and Bhuvaneswar, and certainly at Konarak, it reaches a statement which we have either to reconcile with profundity and subtlety of thought or else confess ourselves baffled and project our own attitudes upon it. Alain Daniélou had nine different explanations of these superbly rendered postures of embrace, each explanation backed by a Sanskrit text and each satisfactory in its own context. And perhaps Raymond Burnier, in photographing the Apsaras with such fidelity, has made his own contribution to our understanding. For in life these figures, as they stand in the notation of the temple-frieze, are flanking larger panels. Beyond the camera's subject is that which does not yet, even when photographed, get into public exhibitions. Look, therefore, into the eyes of the celestial damosels, and learn from their regard or their indifference the lesson of non-attachment.

—Third Programme

The December number of *History Today* (price 2s. 6d.) which now completes the second year of its existence, contains an article by Duff Cooper summing up the series of sixteen contributions that have so far appeared on British Prime Ministers. Peter Quennell writes on 'Chartres: Monument and Legend'; Geoffrey Grigson on 'Flowers and Men'; and Jon Manchip White on 'The Reign of Queen Hatshepsut', the first empress in the history of the world, who nearly thirty-five centuries ago proclaimed herself Pharaoh.

Against the Grain of America's History

PETER DE MENDELSSOHN on his journey to Utah

TURNING one's back on San Francisco, after a bare three days' enchantment, is a heartbreaking affair. Yet—there it was. The sun stood low over the Pacific, and it was time to go east again. Crowned with a halo of blinding glitter, the city seemed to rear its head once more triumphantly above the uproar of copper and gold and then slowly submerged into the sea. The ferry chugged across Oakland Bay, taking the traveller to the far shore and his waiting train. The golden city on the seven hills takes a long time to disappear finally from view. It does not say good-bye light-heartedly.

out sharp and black against the summer night sky, bundled together it seems in groups of fifteen or twenty, lying completely still, lifeless, immobile, more and more of them. There is no end to it: it is like scenery from 'The Flying Dutchman'. When is this fleet going to weigh anchor and sail? It will not sail at all, not this year, not next year, perhaps never. The little American soldier next to me tells me in a whisper—most passengers are fast asleep in their reclining coach seats—that these are the 'black ships of San Francisco', old Liberty ships, withdrawn from service and from the sea. 'You know, not so long ago they saved our lives', I say. 'Oh, did they?' he asks. 'How?' He has only just been drafted and is on his way to his training camp.

Hour after hour the train rolls, glides, sails along, and now and then a tiny explosion, a dull little thud in the ear-drum indicates that desert, sand, moon and solitude have begun to rise and are heaving upwards. What is going on outside in this endless loneliness? The whole limitless immensity seems to have been slightly tipped sideways: everything is oblique, at queer angles, and God alone knows how the moon got suspended in this odd way. At midnight the desert is already 2,000 feet above San Pablo Bay with its ghost fleet, and at one o'clock in the morning, at a station called Sugar Bowl—a corrugated iron shed without a light was all that could be seen of it—it was more than 7,000 feet above the level of the ocean to which we had said goodbye at six in the afternoon. A little later there is another dull thud inside the ear. Presumably we are going down again? But not much. The small town of Ogden on the shores of the Great Salt Lake, which we are to reach the following late afternoon, still lies nearly 5,000 feet above the sea. The great Continental Divide lies a further two days' journey to the east; we shall meet it



An express of the South Pacific Railway crossing Salt Lake on the Cutoff. Below: the Mormon cathedral in Salt Lake City

And from memory it refuses to take leave altogether.

Hours after the express train has started rolling eastward, toward the great desert, and when the sea is no more than a dream, the city is still present and will not go away. An entirely new American world moves up, the eye perceives it dutifully, the pencil makes an entry in the note-book, but the mind is not yet ready to devote its attention to it. Peering out into the gathering darkness, it still sees San Francisco at sunset. These are painful, helpless hours when the heart struggles desperately to hold on to a sense of jubilant happiness which it knows will grow fainter and fainter as the night draws on. How did one ever manage to turn one's gaze east, how did one ever get off that ferry?

But night is here, and the rolling train swishing almost soundlessly, as if on rubber wheels, with the speed of a maniac into innermost America. How these great transcontinental expresses are rolling! They do not rattle and they do not bang; they slide and sail and swim through the night. There is a full moon above California and it casts its pale light far ahead into the endless desert country of Nevada. Suddenly, with a new midnight shudder, one realises what lies in front and on all sides—oceans of sand shimmering like milk, immense solitude flooded with moonlight, not a lantern, not a light, not a single human soul outside until the morning. An enormous waterway emerges from the velvety darkness. Is it a river, a bay, a new ocean? The train crosses the silent water, and now, on the right and the left, masts emerge, the bodies of ghost ships, standing



the day after tomorrow, in the heart of Colorado. There is, one feels, in such a night of inner restlessness something profoundly contrary and absurd in attempting to cross America from west to east. There is something secretly unnatural and improper about it. There is something, deep inside, that goes against the grain of the country, and that grain, one soon discovers, is the country's history. The history of this continent, one goes on musing as the train rolls on, can be really understood only through the continent's landscape. Unless one understands that, it is difficult to find one's way about America.

Where History Comes to a Stop

The landscape, then, is the decisive factor, I thought as I tiptoed my way towards that blessed locality, the rest room, the only place where one is allowed to smoke. The landscape has traced out the course of history, its direction and all its detours, irremovably in advance. The mountain ranges and rivers, the deserts, highland plateaux and swamps, and beyond them again, seemingly unreachable, new, fertile valleys, lakes, and forests—they have formed history, they have assigned the young civilisation its places and allotted to generals their battlefields. As soon as it comes up against an unharnessed river, as yet uncrossed mountain chain, a salt desert, a salt lake, history comes to a stop and waits, five years, ten years, thinking of ways around and out, and how it can get on. The traveller feels this, in every mile, now as 150 years ago. Man has gone with the landscape from east to west, and history went with him, from east to west, and whenever nowadays you cross the United States from New York to San Francisco, travelling in one of the great expresses which really cover the ground, mile after mile, and do not fly over it as aeroplanes do, you feel yourself going with the current of history's stream. When a few weeks earlier I travelled westward, from the Atlantic Coast through Virginia and across Tennessee, Alabama, and Texas, to Arizona, finally reaching the new coast at Los Angeles, I had this very definite feeling of travelling, as it were, 'in the right direction'. I was travelling with America's history, not against it.

Now, in this magic night, as I was rolling on another route in the opposite direction, I could not rid myself of the feeling that the continent, instead of unfolding and opening up as it did on the westward journey was indeed shutting itself in and closing itself up on the eastern approach, as though it did not wish to be entered by that door. That is what makes the whole thing seem so contrary, so absurd—to cross the salt desert, the salt lake, in order to reach Chicago. It is the wrong order of things. History travelled the other way, and we are not going with it, we are going against it. Somehow the mind refuses to accept this and to adapt itself to it.

Did such thoughts ever occur to Americans, I wondered as I entered the rest room. If so, what would they make of it? There were five of them in there, all of them very young soldiers, two Negroes and three white, smoking, dozing, blinking against the light of the unshaded bulb. I sat down among them. American trains these days are full of soldiers going on leave, returning from leave, and all of them travelling immense distances between their homes and their stations. Before I had properly installed myself, a black soldier and a white soldier had each offered me a cigarette. I was in a quandary wishing to offend neither, and eventually accepted both, putting one behind my ear as a reserve. Everybody was happy. The Negro soldier came from the Gulf of Mexico. He turned out to be a student at some Negro college. His white fellow-soldier, although no less friendly was less forthcoming about his private circumstances. Eventually I gathered that his home was in California. The other three men slept. 'You know', I ventured to suggest after a while to the black boy, 'it's odd, but down your part of the world we wouldn't be travelling together like this and talking, would we?' The youngster laughed. 'Of course not', he said, lightheartedly. 'Why not?' enquired his white companion. 'Why not? My dear man, because we wouldn't'. The white soldier confessed naively that he did not understand. 'But we're all in the same army!' he protested. 'Sure', laughed the black boy, 'but we're not all in the same America'. He uttered a sharp high-pitched little giggle which woke the others. More cigarettes were offered round; I never got to touching my reserve.

I left the soldiers arguing for a while. What would this continent look like today I thought, inwardly and outwardly, if the country, the landscape, had been opened up in the opposite direction and history had gone with it? It is possible to imagine Chinese, Japanese, Russians, to have landed on the Californian coast and started the march into the interior long before English, French, and Dutch had gained a foothold on the Atlantic seaboard. It is possible to imagine, for the sake of argument, that the Chinese and the Russians, to whom deserts and vast

desolate stretches of country were nothing unfamiliar, would not have been intimidated by Nevada and Utah, that they would have conquered the Rocky Mountains and advanced step by step to the Great Lakes and the Mississippi. What would America be like today? I put the question to my military companions.

The whole absurd proposition immediately seemed to fire the imagination of the Negro soldier. He uttered his high-pitched giggle. Ah, yes, he thought, the Russians and Chinese would have brought this country under their control, sure enough; they had experience in ruling and administering vast empires, they would have governed it with a very firm hand and established a highly centralised authoritarian state in it. I could almost see him work it out in his mind as he spoke. 'What about the Red Indians?' I suggested. 'Would they have fared better or worse than under the Europeans?' The soldier ignored the question. It was clear that the original inhabitants of the continent meant nothing to him. What interested him was what would have happened once the conquering Chinese, Japanese, and Russian settlers pushed out their frontier to the Atlantic seaboard, thinly and cautiously populated by European settlers. The Europeans would have driven them back, the white soldier boy immediately suggested. They would have pushed them all the way back to the Pacific. 'Why?' asked the Negro boy. 'Why shouldn't the Chinese have pushed them back into the Atlantic and with one stroke of the sword taken the whole place from them, just as the Spaniards had to surrender the west to those coming from the east?'

Oh well, perhaps, the white soldier thought, but this Asiatic despotism would not have lasted forever on the American continent. He was sure of that. Sooner or later this empire would have fallen to the white man, and I felt inclined to agree that in such a conflict, suppose it took place around the turn of the eighteenth century, the Europeans would have eventually had the upper hand, and perhaps the whole thing would not have lasted longer than the civil war. But, even so, America would today be a different continent with a different face. 'Sure', said the black soldier, 'maybe there'd be no Negroes around at all'. The very idea startled and amused him beyond measure. 'What's so funny about that?' asked his companion. The Negro soldier couldn't say: he just had to laugh. I think what struck him as so overwhelmingly absurd was the notion that history and fate were not the same thing.

Dawn was breaking, morning came and with it the attendant and his broom who swept the argument along with the cigarette butts into his rubbish bag. From my reclining seat back in the coach, I watched Nevada awake and Utah approach. The far-away summits of the mountains, pushed out into an endless distance, still stood in a watchful ring round the endless desert. They had not approached one yard. Towards seven the sun began to burn. It glittered across the dry and chappy yellow-brown expanse of sand and hurt one's eyes if one looked too long. All sense of distance was completely lost, endlessness expanded and contracted and expanded again; and to watch the fantastic effects of the midday light gave one a distinctly uncomfortable feeling round the heart. It seemed impossible to fall into step with this perpetually changing monotony, to adapt oneself only for one moment to its incalculable whims. Now, on the right, water appeared, and on the left too—a lake perhaps, some inland sea: how distinctly the sun glittered on it! But instead of coming nearer, it dissolved.

Desert and Desolation

For a moment even the modern traveller of today is seized by something like the powerless, desperate rage which must have gripped the pioneers when the mirages fooled and deceived them again and again. No, there is no water here. There is desert, sand, desolation. But now the glittering begins again, only differently. This time it is salt. We have reached the blessed land of Utah. Little streams appear, damp patches in the sand, the Great Lake cannot be far, and already the hurried traveller discovers in his heart a faint feeling of sadness, of regret for the shimmering majesty of the desert now slowly sinking away behind his back. Again he wished he need not travel so fast. In his hand the twenty hours that have passed since the golden city sank into the sea have shrunk to a moment.

The train crosses America's Dead Sea on a low, wooden dam rammed into the shallow water, 103 miles of it and as straight as a ruler. The dam is called the Cutoff, and it is the longest, straightest and most horizontal stretch of railway line in the world. It is so long, so straight, and so horizontal that it shows the rounding of the globe. And here, in the sight of the immense inland lake glittering in the sun, which only

100 years ago became the tragic undoing of the famous Donner party, in the sight of this astonishing engineering feat, all nightmares and visions dissolve. Here at Promontory, the northernmost point of the lake, on May 10, 1869, the two American worlds met after all. America's history, having conquered the land and brought the continent under control, shook hands with itself, as it were, when the two railway lines, driven forward simultaneously from east and west, met and were joined together by a symbolic gold cramp.

If I had felt, up to now, that I had travelled against the grain of America's history, that I had set out in the opposite direction, I felt so no longer. Down below in the afternoon glow lay Salt Lake City with its gigantic Mormon cathedral. Here, just over 100 years ago,

Brigham Young and his Latter Day Saints, had come to the end of their pilgrimage, when Young rammed his walking stick into the ground and proclaimed once and for all: 'This is the place'. In their museum in Cathedral Square you can see today all manner of mementos devoutly exhibited: Brigham Young's stick, his pen-knife, boots, and hunting gun, but also some decrepit, Victorian, plush furniture from the great Mormon leader's house, brought on ox-carts all the way across America, a piano—things which in London and Paris would have been sold as junk, too old to use, too new to go to a museum. Here they are preserved with love and care. For here they are not just 'yesterday', here they are history, the very beginning of things. And looking at them I felt that indeed America's history had met me half way.

—Third Programme

Britain's New-Style Coal-Miners

By SAM POLLOCK

A WEEK ago I spent a couple of days with some of Britain's new-style coal-miners. They wore no helmets and carried no safety lamps: and in place of the grimy uniform of Durham and the Rhondda they wore duffle coats or wind cheaters, with gumboots that were heavy with the good earth of Worcester or Derbyshire, but with never a trace of coal-dust. And with these new-style miners went a couple of new-style coal-mines: no towering pithead wheels, no slagheaps, no trolleys or railway trucks—in fact, it appeared, no coal. Just a few huts and a group of not very large metal pipes protruding about three feet from the earth, with a stream of near-white smoke pouring from one of them.

What is this new-style mining? Let me start the story with a conversation I listened to some months ago between a mining engineer and a miner from a pit which had been closed down because, it was said, the coal seam there was worked out. 'Worked out?' said the miner. 'Rubbish! There's still millions of tons of the stuff there'. 'That's nothing to go by', replied the engineer: 'there are probably millions of tons of coal right under this building'—which was, incidentally, Broadcasting House—but, said he, 'it would cost about £1,000 a ton to bring to the surface—so what use is it?'

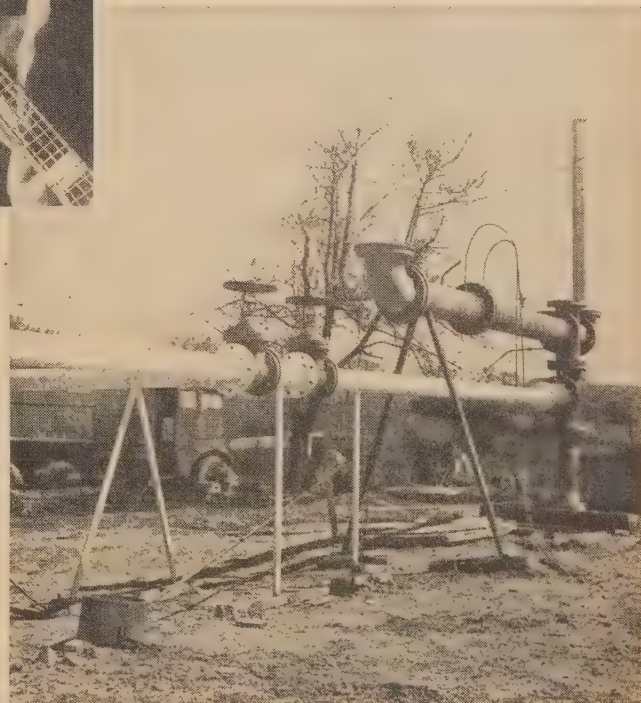
The engineer was only speaking the sober truth. It may be an exaggeration, pardonable in a politician, to say that this island is made of coal. But it is a fact that, in addition to the deep mines and open-cast workings which are now being operated, or likely to be operated in the future, there are hundreds of millions of tons of coal under our feet here in Britain, which it would be hopelessly uneconomic—even short of fuel as we are—to extract by the ordinary mining methods. 'Hundreds of millions' is, if anything, an understatement: there are at least 350,000,000 tons of this coal in seams which we know of, which are level and at less than 600 feet depth: and if we add deeper and thinner and less level seams, and old mines which are considered 'worked out' by ordinary standards, the total is probably well over 1,000,000,000 tons.

The main reason why it would be uneconomic to mine this coal is that in most cases it lies in seams which are so heavily intermixed with dirt that with every ton of coal you brought to the surface there would be tens, or maybe hundreds, of tons of useless earth and stone. It is the enormous cost of bringing this coal to the surface which rules it out as an economic proposition. So, naturally, those who have the responsibility for finding the fuel to keep Britain warm and working, have long been asking themselves: is there no way of tapping this vast reserve without bringing the coal to the surface? Could it, in fact, be burnt on the spot, be gasified where it lies, and the gas so produced be used to reinforce our ordinary sources of power? It was to try to find the answer to this question that the Ministry of Fuel and Power,

with the co-operation of the National Coal Board, is running these new-style coal-mines, which are in fact experiments in underground gasification of coal.

The experiments are being carried out on two sites, both of which I have been to look at: at a place called Newman Spinney in Derbyshire, just over the border from Yorkshire, and at Bayton in Worcestershire. At both places they have returned the answer 'yes' to the preliminary question set them: is underground gasification possible; can it be done? It can. On both sites the coal underground has been successfully set alight—about 1,000 tons of it to date—and gas has been produced. And at the Worcestershire site, the gas has been used to produce electricity. The next, and bigger, question to be answered is: can it be done on a commercial scale? Is underground gasification worth going in for, in Britain, in a big way?

Underground gasification of coal is far from being a new idea. It was first talked about, amongst scientists, not so far short of 100 years ago. I suppose everyone has heard the



Underground gasification of coal: part of the gas take-off at Newman Spinney, Derbyshire, where experiments are being made. Above, inset: thermite incendiary bomb used to ignite the coal seam

rumours of vast gasification projects in Russia. Experiments are also going on in the United States, in Belgium, in Italy, and in French Morocco—and our people are keeping a close watch on all of them, as they are on ours. Simply stated, the basic idea is to blow air through a burning coal seam, to emerge in the form of gas. So obviously, as well as an inlet bore for the air, and an outlet bore for the gas, we need a horizontal passage between them through the coal-seam. In most of the foreign experiments they have relied for this part of the job on actual man-made galleries underground. But in Britain we are trying to do the whole job without a single man going underground—trying and, I may say, succeeding. Before the coal is set alight we are using, at both experimental sites, high-pressure air, pumped into one borehole, to force a passage-way to the outlet. Then we set the coal alight at one end.

There are various methods of doing this. One used at Bayton was to lower down a simple electric element enclosed in a bag of slack. When the fire is well under way, the high-pressure air is applied at the borehole furthest from the fire. Even with my limited knowledge of science, I know that fire needs air, so naturally the fire is drawn towards the bore where the air is being pumped in. When it has nearly reached there, the high-pressure air is switched to the other end, and back goes the fire again to burn up another slice of the seam. That is a very simplified account of an operation which has entailed months of trial and error and disappointment, and just plain hard work, for the men on the spot. At both Newman Spinney and Bayton, there are not two pipes, but a whole cluster of them, some in rectangular formation, some in circular with the exit borehole in the centre—representing various methods that are being tried for, so to speak, ‘keeping the kettle boiling’ until a whole solid panel of coal has been gasified.

There are all sorts of complications, such as the quality of the roof of the seam, and other things which have to be considered, but which, as this is not a technical talk, I will not go into here. The gas produced by underground gasification of coal is what is called producer gas, not the consumer gas which you use for cooking at home. There is much less heat in it: it is, as they say, of a much lower calorific value. I set a match to one of the samples being piped into the little hutted laboratory at Newman Spinney, and got a very dim and broken sort of flame, mixed up with a lot of smoke. It would be no good for direct use, like the gas from your local gas works. The idea would be to use it, through a gas turbine, for manufacturing electricity on the spot. But there is another possible method of using this gas, which they are trying out at Newman Spinney at present. Apart from the heat you can get by igniting the gas, the whole mixture coming from the outlet is rich in what the experts call ‘sensible heat’: it can be very hot to the touch, even white hot, coming from this underground furnace. And this sensible heat can be used to produce steampower, and so, again, electricity.

To come back to that bigger question: is underground gasification,

even now we have proved it can be done, a commercial possibility in Britain? The final answer to that question we shall not know for some years. But I can tell you the sort of considerations which will determine the answer. Obviously, the gas will have to be produced at a cost which will compare favourably with that of any other fuel which we could use to manufacture electricity; and, as it is, our power stations can make electricity with much coal that is unsuitable for other uses. But against that, there is the fact that everyone in the know foresees—indeed we all hope for—a continuously expanding need for power by British industry, a need which we might be hard-pressed to meet from the sources now available. So that coal gasification might offer a valuable reinforcement. But however hard-pressed we were, any scheme which involved power plant having, as it were, to hop from point to point would be extremely expensive, which means that any site where underground gasification is to be operated commercially would have to offer work to the plant for a considerable period. As far as we know, there will be no difficulty on that score: there are many sites in Britain where there is enough coal at workable depths to keep plant running usefully for up to fifteen or twenty years—in some places, more. (Speaking of workable depths, the only theoretical limit there is cost: the deeper you go, the higher the cost. The present experiments are being conducted on seams about 200 feet below ground, but gasification could be economic well below that.)

So there are many more questions to be asked and answered before underground gasification in Britain will have ‘arrived’. The certain thing is that, if the answers are right, we shall be in a position to tap a valuable, and hitherto untapped, source of energy, which could be harnessed to the far greater contribution of the men working in our underground mines, in the drive for more production and a higher standard of living. Underground gasification will never replace the work of the miners of South Wales and Yorkshire and the other great coal-fields—all it is meant to do is to supplement it. In fact, like opencast mining, gasification offers an addition to our fuel supplies, without our having to divert any of the experienced labour force which is indispensable at the underground coalface. The men in charge of operations at Bayton and Newman Spinney seem to have been gathered from the ends of the earth—from oil wells in Borneo, from civil engineering and power stations in India, from exploration in Spitzbergen, and from a science mastership in Ulster; and under them the manual work is being done by men who had never heard of gasification until they started work there. But, unlike opencast mining, with underground gasification there is no great disturbance either of local activities or of the local soil. The earth can be cultivated and grazed almost to the edge of the boreholes, and there are no unsightly ‘tips’ left behind to disfigure the landscape. So here, for a change, we seem to have something which may make a big contribution to our industrial wealth, without further detriment to the land we need to feed us.—*Home Service*

Life, Time, and Thermodynamics

The last of three talks by A. R. UBBELOHDE

IN the human mind the recognition of quantity in observable things, and the use of appropriate units to measure quantity, are deeply ingrained. Indeed, throughout this talk I am taking it for granted that philosophical generalisations about physics are derived from cognition through measurement.

Today we accept as obvious a metrical age, heralded by the publication of Newton's *Principia* less than 300 years ago. The mighty technological progress during the mid- and late-Victorian era publicised many successful uses of this metrical knowledge. Such progress naturally enhanced the prestige of the kind of knowledge that is based on number, and rule, and measurement. Yet, viewed with detachment, there is no obvious guarantee that the practice of using mental yardsticks can cope with all that can be known about observable things. Indeed, even keeping wholly within the domain of physics, restrictions on what can be known by measurement have been clearly recognised since about the beginning of this century. For example, the principle of relativity and the special forms taken by the uncertainty principle express unavoidable restrictions on what can be known by measurement. Today problems

arising from such boundary limitations in the metrical sciences are becoming ever more insistent in the philosophy of nature.

The limit law known as the second law of thermodynamics differs from the two I have just mentioned. Like all laws of physics, thermodynamics refers to metrical observables. But the statement that any spontaneous trend in molecular processes is always towards states of greater probability does not include any reference to limitations of measurement. What this statement of the second law of thermodynamics does require is that molecular trends are wholly controlled by statistical probability. This at once raises one of the key problems of contemporary science, expressed popularly as the problem of life. The functions of living organisms are obviously associated with transformation of molecules. But do the laws of molecular probability completely determine such events as the growth of yeast cells, or the hippopotamus plunging and wallowing in the slime, or Aunt Ellen going out to buy a new hat? A more modest question is whether thermodynamics can make any contribution at all to this problem, even if a completely balanced answer necessarily lies outside the realm of the metrical sciences.

Characteristically, the thermodynamic approach to the problem of life must involve the consideration of molecular probabilities. The question is, how far may we compare living organisms—the yeast cell or the hippopotamus or Aunt Ellen—with thermodynamic systems? Before he composed himself for a nap in the coach, Mr. Pecksniff said: 'The process of digestion, as I have been informed by anatomical friends, is one of the most wonderful works of nature. I do not know how it may be with others, but it is a great satisfaction to me to know, when regaling on my humble fare, that I am putting in motion the most beautiful machinery with which we have any acquaintance. I really feel at such times as if I was doing a public service'.

Nowadays detailed chemical information has been obtained about a number of the wonderful works of nature, such as the digestion of food, and the oxidation of various substances by the oxygen dissolved in the blood stream. These unit processes, such as digestion, are linked with the life of the organism as a whole. Some of them can be carried on outside the organism. Within the organism, unit processes do not cease immediately what we call 'life' is recognised as extinct. We may safely accept that the trends exemplified in these unit processes obey the ordinary laws of statistical probability for molecules. Modern experience of limit laws suggests that some sort of limitation will eventually be encountered in a purely metrical approach to the problem of life.

Nevertheless, since unit processes can be identified in living organisms, it is pertinent to study how far a purely mechanical build-up of unit processes can represent what we observe about life. As far as the second law of thermodynamics is concerned, the simplest approach is to consider molecular probabilities of spontaneous processes.

Concerning the Origins of Life

The first problem deals with the origins of life. Starting from inanimate matter, the probability of a spontaneous swarming of the molecules occurring so as to produce even the simplest form of life is so fantastically small that no thermodynamic prediction of the occurrence of life is possible in the light of our present knowledge. Consider unit processes, however. I have said that unit processes, as far as they have been studied in a living organism, can be described in terms of chemical reactions: and these chemical reactions obey the laws of thermodynamics. The point is that even in the simplest form of life it is particularly the spontaneous integration of unit processes into a connected self-perpetuating sequence that must be regarded as an extremely improbable event in the molecular sense. In more complex living organisms the various specialised functions, such as the capture of food, or the complex drama of reproduction, follow paths that are so uncommon on any pattern of molecular probability that it seems safe to say that thermodynamic probabilities are not relevant to the emergence of living organisms considered as integrated units. When intelligent processes are included, such as speaking or writing or thinking, the argument is even stronger. The ordinary evolutionary trend of molecular processes does not apply to the connected whole of any human being whose integrated pattern of behaviour is most highly improbable in the statistical molecular sense.

This conclusion echoes one of the perennial problems in natural philosophy. What is the nature of the integration of processes which we recognise in a living organism? In so far as a dog or a cat includes a wide diversity of highly ingenious chemical and physical processes in its organism, is there any hope, by dint of human intelligence and perseverance, of synthesising analogous organisms? Using older expressions, is the mechanistic hypothesis valid? Or, in more modern terms, is there any hope of synthesising life? Though we cannot answer this question fully in terms of molecular probabilities of thermodynamics, it is possible to go some way in discussing the problem.

Before methods of controlling inanimate energy were fully understood, romances about the para-human behaviour of synthetic homunculi were popular. Mary Shelley's story of the monster Frankenstein was published in 1818, Goethe introduced a homunculus in the second part of Faust, written between 1808 and 1852. But, as our scientific 'know-how' grows from generation to generation, we come to appreciate more and more the extraordinary richness of what is analogous to know-how in the creatures that surround us. With their less developed scientific knowledge the Victorians could appreciate, for example, the engineering aspects of an animal skeleton. With our present knowledge of chemistry, we are beginning to appreciate the much more complex processes of animal physiology. Electronic computing machines, publicised in the popular press as electronic brains, begin to suggest how the behaviour patterns of animate organisms might be linked up

with recognisable electronic processes. But every step forward in human scientific invention makes it clearer how extremely rich and delicate the adjustments must be in the continued integration of a living organism.

I have dealt with one problem in the application of thermodynamic probability to living organisms. And we have seen that the integrated totality of mechanisms in living organisms is so fantastically improbable, considered as resulting from the swarming of molecules, that the appearance of living organisms in the trend of time must be regarded as a unique and not a predictable phenomenon. The laws of molecular chance are not relevant to the emergence of living organisms in evolution. Such non-probable emergence might usefully be termed 'creation', though of course the meaning to be given to this term cannot be fully discussed in terms of thermodynamic probability.

A second, more particular problem, is this. Even if the creation or emergence of living organisms cannot be predicted in terms of molecular chance, what about the functioning of the organisms once they have arrived? Does their integrated functioning, as distinct from their emergence, evade the laws of thermodynamics which do, however, apply to the unit mechanisms which the integration of life includes? This problem is not yet solved by research. Many years ago the Scottish physicist Clerk Maxwell suggested how the law of entropy trend could be evaded by a demon endowed with the power of selecting single molecules according to their energy content. All Maxwell meant by a demon was a being capable of making non-probable selections in a collection of molecules. Experiment has still to decide whether living organisms do in fact achieve what Maxwell postulated for his demon. Processes of selection on a molecular scale, associated with some of the unit processes of living, could result in a net decrease in entropy due to the organisms. If that were true, then by choosing the right strains of bacteria or yeasts or poly-cellular organisms and growing them on a super-mass-production scale we might eventually do without our coal-mines and oil-wells. We might terminate research on nuclear reactors, and divert the taxes that support nuclear research, to foster thermodynamic studies on micro-organisms.

However, as research develops on the thermodynamic balance of living organisms, it may be found instead that the concept of molecular probabilities loses its usefulness in dealing with the more complex integrations of life. In the meantime, my own guess is that there is no escaping from our entropy doom in this direction. The reason for my belief is that all living organisms take in food of some kind, accompanied in some cases by energy, such as light. Part of the food is used in the integrated physico-chemical mechanisms in living; part is rejected as waste matter which is almost certainly of much higher entropy and lower free-energy content. If this opinion is proved to be correct by subsequent research, living organisms only manage to evade the law of entropy trend at the expense of a greater increase in entropy outside themselves. They achieve a little precious order within themselves at the cost of much disorder around themselves. This process is rather like furnishing a room by throwing most of the contents of a furniture repository out of the window so that what is left inside is arranged functionally. Even if this be all, it emphasises the remarkable thermodynamic character of living organisms. But still it would not involve a complete evasion of the entropy doom of the world.

What We Mean by Time

Turning now to some of the more recent ideas about the trend of entropy in time, it is helpful to grasp these by reviewing what we mean by time, and what we mean by statistical equilibrium. History and pre-history suggest that two aspects of time have always been more or less consciously present in the minds of those who think at all about the matter. The clearest aspect of time is that of mere duration. Even primitive peoples, from observation of the heavens, measured duration, upon which the web of human life is stretched as on a framework. Duration is of such obvious importance to human affairs that unending efforts to facilitate its measurement are found throughout history. It is true that processes within the atom may provide better units for constructing a modern scale of duration than observation of the skies. But a distinction between years and micro-seconds is a mere question of decimal points.

A noteworthy feature of dividing duration into units is that this does not establish any direction in time. For example, according to the mathematical equations of motion it is just as easy to go backwards as forwards in duration. Human experience, on the contrary, is that one

(continued on page 1074)

NEWS DIARY

December 17-22

Wednesday, December 17

North Atlantic Council meets in Paris. Mr. Eden speaks on German problem

Chancellor of the Exchequer discusses export problems with representatives of both sides of industry

Yugoslavia breaks off diplomatic relations with the Vatican

Thursday, December 18

North Atlantic Council publishes statement emphasising importance of increasing quality before quantity of defence forces

Miners' delegates reject offer of wage increase of 6s. a week for men earning minimum rate

Chancellor of Exchequer makes statement about purchase tax on motor cars

Friday, December 19

Transport Commission to ask for increased road and rail fares in London and increased railway fares elsewhere

Parliament rises for Christmas recess

Argentine Foreign Minister announces imminent conclusion of new Anglo-Argentine trade agreement

Saturday, December 20

Bey of Tunis agrees to sign decrees promulgating reforms urged by French Government

Eighty-six persons killed in air disaster in Washington State

'People's Peace Conference' ends in Vienna

Sunday, December 21

Soviet Union tables motion at U.N. General Assembly condemning 'mass murder' of Korean prisoners

French National Assembly debates Budget

Israel rejects Polish demand for recall of her Minister from Warsaw

Monday, December 22

U.N. General Assembly adjourns after rejecting Soviet charges against American forces for 'mass murders' of prisoners in Korea

Kenya Government introduces new measures to deal with present emergency

Joint Anglo-Egyptian communiqué published in Cairo announces progress in discussions on future of the Sudan

CHRISTMAS H



Wendy, watched by John and Michael Darling, is taken for a trial flight around the nursery by *Peter Pan*: a scene from this year's production of Barrie's play at the Scala Theatre, London. Peter Pan is played by Brenda Bruce



A variation on the traditional 'girl fired from a cannon' act is included in *Jack Hylton's Circus* at Earl's Court; Inka Atomia and Leo Dinant photographed as they are shot together 100 feet through the air into a safety net



Edith Crocker and a performing bear round the ring at the Kelvin Hall Circus, Glasgow



'Hounds' who take part in the hunting scene in *Beauty on Ice*, the pantomime at the Empire Theatre, London



Right: a life-size replica of 'Prudence Kitten' which has been made for *The Muffin Show* being presented this year at the Vaudeville Theatre, London. Muffin the Mule, Prudence Kitten, and other puppets who appear in children's television are taking part

HOLIDAY ENTERTAINMENTS



Four members of the chorus in 'Jack and the Beanstalk on Ice' at the Empress Hall, Earl's Court, London, operating some of the hundred skating puppets which take part in the show



Emilio Zavatta, the Bounding Hobo, during his tight-rope act at Bertram Mills Circus, Olympia. H.M. the Queen attended a royal performance on December 18



Charlie Chester, who takes the part of Cheerful Charlie in 'Jack and Jill' at the London Casino, is carried off-stage by the Terry children during a scene from the pantomime



The Francescos, three of the leading clowns in Tom Arnold's Circus at Harringay Arena, North London. One of the principal acts at Harringay this year is Pinito del Oro, the Spanish trapeze artist, who performs sixty feet above the arena

Left: Cinderella, the Snow Man, and Father Christmas in the Enchanted Wood: a scene from the full-length puppet pantomime 'Cinderella' presented by Mr. Ron Field at the New Torch Theatre Club, London

(continued from page 1071)

cannot go backwards in history. By degrees this historical aspect of time has emerged more clearly. A compact distinction is between metrical time, which counts up units of duration, and time regarded as a trend of change. Before the law of entropy trend was clearly recognised, only duration could be used in calculations about the behaviour of matter. Indeed, towards the middle of the nineteenth century the promise was probably at its brightest that a mechanistic interpretation in terms of equations of matter and motion could eventually be given of everything in the world as we know it. But even at that time, the assumption that what we can measure comprehends all that we can know was a limit to the mechanistic hypothesis. Now, starting from within the domain of measurement, experience of limit laws has led to much greater caution. The limit law of thermodynamics gives a quantitative expression of trend in molecular events which is closely connected with ideas about statistical equilibrium.

A Bang before the Whimper?

Mechanical equilibrium which involves a balance of forces was known to the ancients. Statistical equilibrium which involves a balance of opposite trends is the modern invention. Though minor changes in the energy and positions of molecules may be taking place all the time, in statistical equilibrium there is, on average, no change either way. Statistical equilibrium can readily be studied in small enclosures of matter, for example, the liquid and vapour in a glass bottle insulated from the surroundings. On a somewhat larger scale, calculations on statistical equilibrium are often of great economic importance, since they give limit-figures for the productivity of chemical industry. On a still larger scale the earth as a whole can be regarded as an isolated thermodynamic system. It contains an enormous number of statistical units, about a hundred billion billion billion. But because of the energy stored in various non-equilibrium forms, such as coal, oil, and uranium, and because of the energy received from the sun, about 7,500 horsepower per acre, an unforeseeably long time may elapse before the heat death corresponding with statistical equilibrium can be realised for the earth as a whole. The feeling is that in any case the world may come to an end with a bang, for example by an astronomical collision, long before the whimper of molecular trends ceases owing to the attainment of maximum entropy. This being so, interest today has moved away from an-entropy doom that may never be reached by the world as a whole.

But the question in reverse is arousing increasing discussion. If the trend of events on a molecular basis is such as to increase entropy continually, from what minimum did the process start? The increase of world-entropy has been compared with the running down of a clock as the energy stored in the mainspring is used up. On this basis, the question is whether we can calculate when the clock was wound up. Though rather exciting, conclusions on this point are still very debatable; but from rather fragmentary evidence a tentative view is that the world of observables started about two thousand million years ago.

When Radiation Equilibrium is Reached

In a system in statistical equilibrium there is no trend of molecular events in time. This rather abstract statement becomes more striking when radiation equilibrium is considered. Radiation equilibrium is closely linked up with modern discussions about the entropy increase associated with the mere act of making observations. Think of an observer at the centre of a garden. The observer can receive certain impressions through the actual movement of molecules, such as the scent of flowers, or the buzz of insects. But an incomparably richer diversity of information about the objects in the garden is conveyed by light waves rather than by actual contact with molecules. For an observer inside an enclosure, such as a cinema hall, information about objects and hence about events within the enclosure is again predominantly conveyed by light waves. Other electromagnetic radiations, which can be detected by modern instruments, could also be utilised for making observations. But a curious thing happens when radiation equilibrium is reached. Statistical equilibrium of radiation in such an enclosure means that the radiation travelling in every direction is exactly the same. When an object is encountered, some of the radiation is, of course, absorbed or reflected or scattered. Under non-equilibrium conditions it is by these differences of reflection and absorption, or by scattering, that objects can be discerned by the central observer. But

at equilibrium these various effects exactly compensate. As a result, it becomes impossible for an observer to discern any material objects by vision or reception of electromagnetic waves inside an enclosure once radiation equilibrium has been reached. Likewise, inside an enclosure in molecular equilibrium it is impossible to discern objects by molecular movements.

The final outcome of these and more detailed considerations is that inside an enclosure in complete statistical equilibrium with regard to both matter and radiation it is impossible to get any information at all by distinguishing material objects. Objects which cannot be discerned by molecular movements or by vision just vanish, and so become non-existent for a metrical observer. Even if molecular changes are by chance arrested before they reach equilibrium, as long as any vision of the world is called for the entropy of radiation must continually increase. A continued trend towards increasing entropy is necessitated by the requirement for continued visibility or 'observability' which we equate with a measurable existence of material objects.

Although only a part description can be given when the approach is by way of natural philosophy and thermodynamics, a broad view of human experience suggests that man lives in a dual world. Observations involving vision or molecular movements must take place in the framework of entropy trend. But aspects of life such as those connected with the intellect and will, which cannot be described in terms of probability statistics of molecules, must lie outside the trend of entropy-time. It is only after death that the law of entropy increase takes complete control of the discarded body, which hurries to fulfil by its disintegration the entropy doom to which all inanimate matter is condemned.—*Third Programme*

The Reith Lectures—VI

(continued from page 1064)

of Marcus Aurelius, we find a spiritual vacuum here also; for these earlier conquerors of the world, like us, their present western counterparts, had long ago discarded their ancestral religion. The way of life which they had chosen for themselves and had been offering to all orientals and barbarians whom they had brought within the range of Greek cultural influence was a secular way, in which the intellect had been conscripted to do duty for the heart by working out philosophies that were to take religion's place. These philosophies, which were to have set the mind free, had bound the soul to the sorrowful wheel of natural law. 'Up and down, to and fro, round and round: this', the philosopher-emperor Marcus confessed to himself, 'is the monotonous and meaningless rhythm of the universe. A man of average intelligence who has arrived at the age of forty years will have experienced everything that has been and is and is to come'.

This disillusioned Greek and Roman dominant minority was, in fact, suffering from the same spiritual starvation as the majority of contemporary mankind, but the new religions which were now being offered to all men and women without respect of persons would have stuck in a philosopher's throat if the missionary had not sugared the strange pill for him; and so, for the sake of accomplishing their last and hardest task of converting a Greek-educated die-hard core of a pagan public, the new religions did clothe themselves in divers forms of Greek dress. All of them, from Buddhism to Christianity inclusive, presented themselves visually in a Greek style of art, and Christianity took the further step of presenting itself intellectually in terms of Greek philosophy.

This, then, was the last chapter in the history of the world's encounter with the Greeks and Romans. After the Greeks and Romans had conquered the world by force of arms, the world took its conquerors captive by converting them to new religions which addressed their message to all human souls without discriminating between rulers and subjects or between Greeks, orientals, and barbarians. Is something like this historic *dénouement* of the Graeco-Roman story going to be written into the unfinished history of the world's encounter with the west? We cannot say, since we cannot foretell the future. We can only see that something which has actually happened once, in another episode of history, must at least be one of the possibilities that lie ahead of us.

—Home Service

Mulled Wine and other Christmas Fare

By ISABELLE VISCHER

IN Austria, on Christmas Eve, carp is the main dish, and on Christmas Day it is usually goose and hardly ever turkey, and the goose is accompanied by many local spicy confections and pastries: 'A frightful blow-out', as an Austrian friend puts it. In Germany, too, carp is eaten in many parts on Christmas Day, or at New Year's Eve in Berlin and Hamburg, followed later in the evening by doughnuts and champagne, which seems to indicate the digestion of an ostrich. In Berlin, too, a kind of split pea or haricot soup used to be eaten, and perhaps still is, as it was supposed to be lucky to eat husked vegetables (vegetables from pods). Sometimes the carp's scales were carefully dried, and kept in one's purse as a talisman against being short of money.

Christmas Fare in Sweden—

And this is Christmas in Sweden as it was described to me by a friend: luncheon at twelve, a large special Christmas ham with apple sauce, prunes, herring salad garnished with whipped cream and chopped, hard-boiled eggs, small meat-balls, baked red cabbage, sausage, boiled potatoes, omelettes with mushrooms or peas, several cheeses, spring onions cooked in cream. After this meal the tree is decorated and the presents wrapped up in parcels and put in a large hamper. Already at five o'clock, or at the latest half-past five, they have the typical Swedish *hors d'oeuvres* with schnaps and beer, then soup with a specially prepared boiled fish, then a rice pudding with almonds in it—these you are not allowed to eat unless you make a rhyme—and many small cakes with whipped cream and jam. And, of course, there is lots and lots of marzipan. A Norwegian friend tells me that the classical Christmas meal in Norway is dried cod-fish which has been previously soaked for weeks in brine and potash, the potash being gained from a solution of birchwood ashes. My friend assured me that it tastes marvellous. This is accompanied by boiled potatoes and *aquavit*. In Norway, children do not receive Christmas stockings but a basket in the ceiling full of gifts and sweets which the children can pull down and draw up again at leisure.

A young friend gave me interesting descriptions of Christmas customs in Silesia, where she was a child, before the war. One is a custom for December 4, which is St. Barbara's Day. Children collected sprigs and branches of cherry trees which were kept in water in a warm room until December 25. On Christmas Day they stood in full bloom. Cherry blossom at Christmas—what a table decoration! The young friend who told me about this quite recently, added grimly: 'You know that the wild cherry blossoms have a tiny red line'. (As many will know, St. Barbara was beheaded.)

Spiced cakes, honey-cakes called *biscaumes* or *lebkuchen*, made from almonds or hazel nuts, are Switzerland's speciality—as is also quince paste. Little sausages made of it are hung on the Christmas trees. In Basle they excel in wonderful drinks and punches more delicious than any I have tasted anywhere in the world. They are served to all visitors at any time of day throughout the Christmas week, sometimes with delicious results. The best of all is a kind of mulled wine which is called Hypokras. Here is the recipe: boil half a bottle of sweet white wine with three-quarters of a pound of sugar. When cold, add to it two bottles of red wine (Roussillon for preference, if available) and the rest of the white wine. Put it into a container, which you can keep fairly air-tight, with a muslin bag containing two sticks of cinnamon, a few cloves, a tiny bit of nutmeg. They must macerate in the wine for six weeks to two months. The result is both unctuous and heart-warming. It will provide the most cheering 'elevenses' for weeks, and should be accompanied by special, very hard, spiced cakes called *leckerli*. Those of you who bother to make some next year will enjoy this after-glow of Christmas. This is the recipe for the accompanying *leckerli*, for they must be home-made. Two pounds of unpeeled, finely cut almonds, two pounds of sugar, two tablespoons of ground cinnamon, half a teaspoon of ground cloves, some nutmeg, a pound of mixed candied peel, four pounds of honey, preferably old, say a year old, three to four pounds of flour, one grated lemon rind,

one glass of kirsch. Half this quantity can be taken, of course. Melt the honey and the sugar over a low fire, add the almonds and, gradually, half the quantity of the flour, then the rest of the ingredients and flour, and finally the kirsch. Mix and beat thoroughly over the hotplate but not on the fire; this must be done very quickly while the mass is still hot, and the only way to do it is to use your hands. When it is well mixed, put it on the pastry board and roll it out about half an inch thick, cut it into oblong squares about three inches by two inches, put them closely together on a tin, and bake in a very hot oven, either immediately or after a few hours. After baking, brush them over with some white melted sugar, to give a transparent, white glaze.

Christmas fare seems to have more importance in northern Europe than—as far as I can judge—nearer the Mediterranean. What about France? France is, of course, the country where one can always find the best food, but for good Christmas fare give me England. A perfectly cooked English Christmas dinner will be a complete revelation to any honest Frenchman. But there is ignorance and prejudice in France on that subject, as we can gather from the writings of Mr. Alfred Suzanne, who wrote on English cookery and who accuses us of devouring hecatombs of roast birds, meats, and mince pies, and who calls our Christmas meals 'gastro-religious feasts'—from which one can only conclude that he has an introspective palate.

On our island itself there are many specialities. Scotland has the Scotch currant-bun, a kind of rich plum-cake baked in pastry, and I am told that Stilton cheese is an important item on the Scottish Christmas menu. Then there is the Welsh barrabirith, a rich currant loaf which can also contain candied peel and caraway seed and is cut into slices and buttered. In Bedford and North Bucks an apple pie called Florentine is mentioned in Florence White's remarkable book, *Good Things in England*, and she tells us that the following is a dish served at breakfast on Christmas Day in the Isle of Man. It is called Sollaghan. To make it, put some oatmeal in a pan on the fire and keep stirring till it is dry and crisp, then skim the top of the broth-put on to it and stir well. Eat with pepper and salt. I do not find this dish very tantalising. Snap-dragon is great fun. This is raisins in brandy or rum, set alight and pulled out of the flames. Whoever gets most may perhaps receive a prize, and most certainly will have good luck.

—And in Old-time England

And now let us reconstruct one of the good old English Christmas dinners, made immortal in its humblest form by the Cratchit family. There are indications that boar's head is coming to the fore again, after having been in oblivion for a while. For a long time in later years it figured only at Christmas meals given by the liveried companies of the City of London, and the full ceremony with procession and singing has always been observed at the Queen's College, Oxford. There the boar's head appears in great glory, teeth resplendent and tusks polished and a red baize tongue. Artificial eyes are put in the sockets, which are touched up with red colouring to give a fierce expression. The head is decorated with a crown, flags, and gilded sprigs of holly, may, and rosemary.

In the middle ages the turkey was missing from Yuletide feasts, but there were a host of other birds: swans, peacocks, geese, curlews, herons, mallards, sea-gulls, whimbrels. Turkeys were first brought to Spain from Mexico, but were introduced into England much later, and became immediately most popular amongst those who could afford them. In Shakespeare's day the African guinea-fowl was known as the turkey. It is mentioned in 'King Henry IV', Act II. By the seventeenth century the domestic turkey was well known in England.

Turkey is often served too dry. This is mostly due to poor stuffing. The quality of the stuffing is most important, for the naturally dry flesh needs moisture and can then be permeated by juices, fumes, and aromas. Here is a good recipe for stuffing: mince some pork, bacon, suet, and *porc* fat (Danish tinned *porc* helps), add some tongue cut into small dice, if possible. Fry up the liver of the bird with two large, finely

chopped onions or four or five shallots. Add a little white of bread or rolls softened in water, nutmeg, a tin of *foie gras*, truffle peelings and, if possible, pieces of truffles. Mix well with one whole egg, add two tablespoons of cooking sherry and at least a dessertspoon of brandy. The brandy and truffles and *foie gras* seem an extravagance, but, once tried, one never fails to go to any length in order to attain again this 'deliciousness'. Young turkeys can be recognised by the grey, shiny, moist scales on their feet and by their weak spurs.

And now we have reached that flaming joy: the Christmas pudding. For years I remained unworthy of its excellence, until, one day, George, the Cockney of Cockneys, asked to be allowed to make our Christmas pudding: the result was a revelation! And the secret? Alcohol, of course. How many bottles of whisky, rum, and stout, and what else helped to make it so good, I could not say or remember; how many swills George took, I do not care to think, bless him, but it certainly was a masterpiece. As an accompaniment, I prefer to brandy butter and all fancy sauces a judicious mixture of cream (top of milk, these days) and rum with sugar. The Christmas pudding is a very ancient institution. It was served, fully ablaze, at a feast given to the Bishop of Salisbury in 1417.

And the crowning glory: mince-pies. About these, little can be added. When I serve them to my many foreign friends—Swiss, Belgian, French—however spoilt they may be, however fastidious—the mince-pies always receive an enthusiastic ovation and, more often than not, at the second course, someone will ask in an undertone: 'Will there be mince-pies? In that case I will not have a second helping', and, indeed,

when they do appear, they disappear again with a rapidity which always amazes me.

A charming elderly cook, who served in one family for fourteen years and in the other for thirty-two years, was describing to me how she remembers the poor people's Christmas in her childhood days. This is exactly how she said it:

Sixty-two years ago at Christmas time, M.P.s and their wives would give to poor people in town and country a dozen sheep and half a hock of beef. The kind gentry round about would give sacks of swedes, potatoes, onions, celery, and carrots. The butchers would come and cut the meat up in the covered market-square of the town, and the mothers would devote a whole day of their time to preparing the vegetables. Sometimes it was bitterly cold in the open square. The meat and the vegetables would be kept cooking in a large vessel in the market-square all night. Two days before Christmas, M.P.s and their wives would dish it all out to the poor people and to each child an orange. The soup was very good, I can remember its taste.

The Vicomte de Mauduit complains that had Oliver Cromwell had his own way, the jolly Christmas festivals would have died with him. 'They did in some ways', says the Vicomte, 'as far as certain dishes and their ceremonious preparations and serving are concerned'. One is sometimes afraid that our days of austerity may finish the work of the Puritans and may also pass the death sentence over many a luscious dish. Meanwhile, with what remains, let us all eat, drink, and be merry; and a Happy Christmas and New Year to you all.

—Third Programme

Television for Marine Research

By HAROLD BARNES

THE marine biologist can study the plants and animals living on the shore, and even in shallow water, visually. But to investigate the deeper waters, which constitute by far the greater part of the seas, he has had to rely in the past on nets and dredges and grabs. These instruments, often very simple yet quite effective, when either drawn through the water or dragged over the bottom, can bring up samples of the varied populations that live in the sea; and it cannot be denied that in this way the biologist has obtained a rich treasure of organisms. Indeed, the study of these over many years forms the basis of marine biology.

In all these methods the sampling is, so to speak, 'blind'. It is not possible to make any choice, although, after some experience, it is possible, of course, to know what to expect in a given area. However, we cannot tell how the organisms were arranged relative to one another before they were disturbed by the sampling device, and so we lose a good deal of valuable information with these older methods, since it is desirable, when trying to interpret the biology of the sea floor as a whole, to know the relations of the organisms, one to another, and to the type of sea-bottom where they are found. In recent years marine biology has tried to close this gap in our knowledge of the under-water scene. Frogmen have made observations on special aspects of under-water life. By using under-water cameras and taking films in colour and monochrome they have been able to obtain some valuable permanent records. But this work has been done in comparatively shallow waters. In addition a number of marine laboratories now have submersible cameras. These take pictures either automatically when the camera touches the bottom, or when the necessary controls are worked from a ship. And, of course, there have been notable descents such as that of Dr. Beebe, some years ago, to very great depths, even as much as half a mile, in a specially constructed steel bathysphere.

Under-water television is the most recent addition to the tools of the marine biologist, and equipment for its use in this particular field of research has now been set up at the Marine Biological Station at Millport, in the Firth of Clyde. Actually, the possibilities of its use for marine biology were tested some years ago by observing animals through aquarium windows at the London Zoo. Experiments were then made at Millport with a prototype equipment, including a submerged television camera, in a concrete tank sixty feet long. Under these conditions the intensity of the light and the turbidity, that is the 'muddiness' of

the water, could be controlled and we obtained excellent pictures of many forms of marine life, such as anemones, various sorts of crabs, and fish such as cod. These experiments suggested that the technique would prove useful in deep waters, and a sea-going equipment is now available at Millport. We have only just begun to explore the possibilities of this new method, and while there is a very great deal still to be learned, the results so far have justified the hopes held out by the earlier experiments.

The equipment consists of a television camera with its thirty-two-core cable bringing up electrical signals that are turned back into the visual picture on a viewing screen. Lights must be provided for the camera in order to illuminate the under-water subject, and lights, lighting cable to the lamps, and the camera are all lowered into the water on a non-spinning rope. All the necessary cables are 600-feet long—that is, enough to lower the camera to the greatest depths known to occur in the Firth. In the laboratory on board is all the control equipment as well as the viewing screens. The equipment is being worked on board the Station's research ship, *Calanus*. She is only seventy-five feet long, and the handling of such heavy equipment on board a small research vessel, as well as the organisation of the control gear on board, needs a good deal of skill on the part of the captain and crew. Care is particularly necessary to make sure that such complicated equipment does not suffer damage during its descent. A careful check on its depth is constantly kept by means of the echo-sounder on which the equipment may actually be followed going down. All the time the scientists and viewers below deck are in constant contact, by means of a microphone and talk-back, with the captain and crew. In point of fact, the danger of hitting the bottom violently and damaging the apparatus is less than might be expected. Near the bottom, light is reflected back into the camera and instructions can quickly be relayed, warning the crew. From the word 'go' it is only a matter of minutes before one sees a picture of the ocean bed.

Since the camera is far away from the viewer, it is necessary to be able to operate certain of its controls from the ship and so we have provided remote-control devices by which a number of adjustments may be made. We have remote control of the focusing, of the iris (adjusting the light entering the camera), and, by means of a revolving turret, the lenses can be changed at will. There is therefore considerable flexibility. For example, using a wide-angle lens, large patches of the

sea bottom can be scoured for their salient features and for a general examination of fauna: some particular animal may then be selected for more intensive investigation, or something may be seen happening which suggests a more detailed scrutiny. During a recent experiment we were watching the behaviour of a number of brittle stars: we suddenly saw them moving rapidly from the centre of the picture. The lenses were changed to have a close-up of the scene, and we found that the disturbance was due to a small but very pugnacious crab that was vigorously attacking these brittle stars.

What are the advantages of this new technique? In contrast to the old methods, which were something of a lucky dip, the observer sees the plants and animals in their natural habitat and he can search for any particular animal or collection of animals. In this way under-water television makes the older techniques more effective since it gives a clear indication of what can be found, and where. Then, unlike diving techniques, this one holds no risk to human life, and the depths which can be explored are far greater than those reached by free divers. In contrast to under-water camera methods, it enables the scientist to view continuously and a permanent record can still be obtained either by a photograph of the actual television screen, or, better still, by the use of a remotely controlled under-water camera, sent down with the television apparatus. Then an ordinary photograph can be taken directly of anything of particular interest seen on the screen.

And what about the disadvantages of this new technique? Unlike the older methods—the nets, the dredges, and grabs I mentioned earlier—it cannot bring up the animals for detailed examination in the laboratory. While it may be used to discover some animals which have so far escaped capture, it can never replace the classical methods of investigation. There is another difficulty. Except in clear, shallow waters, and good sunshine where the natural light is sufficient to obtain pictures, the under-water scene needs to be artificially illuminated. This is perhaps the greatest of all the difficulties in the development of under-water television. Sea water contains considerable quantities of suspended particles—both minute living organisms and particles of mud and sand. When illuminated under these conditions, it is very much like trying to see objects in a fog at night by means of car headlights. The result is to destroy the clarity of the picture, and when the turbidity of the water is excessive, it makes precise observations impossible.

In the early stages of development it would seem that we can best use under-water television to learn more about known animals in their natural habitat—for example, the details of the continuous distribution of a number of well-known species. The bottom of the sea is by no means uniform—it varies from rock of various sizes to shingle, sand, and mud—and it has been possible to follow the distribution of a

number of animals over such different grounds. In a space of several hundred yards the animals have been found to change as the type of bottom changes, and such variations have been followed continuously for quite long distances. It then becomes possible to draw a map, so to speak, of the area on which are shown the type of bottom and the animals inhabiting it. Then, again, it is a simple matter to count the number of animals accurately in a given patch of ground; and in any attempt to use the apparatus in studies of the economy of the sea an accurate knowledge of the numbers present is most important. For example, in studying mussel- or oyster-beds, it is important to know their numbers as well as the numbers of other species preying on them or even competing for the same food.

Apart from living creatures, we also want information on how different types of gear behave when far out of sight under the water: for instance, how much the meshes of a net stretch as it is drawn through the water. Here again it seems that under-water television can help. The apparatus also can be used to read various types of instruments such as thermometers and current meters. Of course, it is not economic to use television for such purposes as these, but under certain circumstances (perhaps combined with other work) it may be useful.

All the subjects I have mentioned so far are either immobile or, at any rate, slow moving during the time of viewing. Many creatures living at the bottom of the sea are often either sedentary, such as the barnacles and anemones that are fixed in position, or only sluggish in their movements, such as the starfish. Can we extend under-water television to work on fast-moving and mid-water animals? This presents very considerable problems. It is necessary to look at a wide field, otherwise the fast-moving animals are past the screen before they can be recognised. This, in turn, means a large area must be adequately illuminated, and the problems associated with turbidity become particularly acute. Again, we do not know the effect of light on these highly developed and extremely sensitive creatures. But many kinds of fish have been clearly recognised—and some have been watched while they took bait from a line. With the less mobile flat fish—such as plaice and sole—these problems are less acute and it has been possible to recognise such species, no mean feat when you realise how they are camouflaged.

Our preliminary work has shown well that there is a future for under-water television in marine biology, whilst there is a great deal of work to be done on the best way of using it. All this involves not only electronics, lighting, and so on, but careful navigation and skill in the handling of the ship and the equipment. These are the problems we are now tackling in the Clyde.—*Home Service*

Letters to the Editor

The Editor welcomes letters on broadcasting subjects or topics arising out of articles or talks printed in THE LISTENER but reserves the right to shorten letters for reasons of space

Germany and the West

Sir,—While the present-day effort to attract Germany into the community of the western nations is largely a matter of political expediency, one cannot help wondering why it should be necessary for otherwise responsible individuals to make statements which cannot be verified by reference to any serious historical work.

In his recent discourses on the wireless (printed in THE LISTENER, October 30 and November 6), Dr. Bonn based his deductions on the following two erroneous postulates:

1. That it was Germany who invariably opposed Russian expansion towards the west
2. That the present partition of Germany was a deliberate act on the part of the Allies

Concerning the first, it should be remembered that, until after the partitions of Poland, *i.e.*, the beginning of the nineteenth century, Germany and Russia had no common frontier, and for several centuries prior to the partitions the westward aspirations of the latter country were

successfully opposed by Poland and Poland alone. After the partitions it was again Poland who opposed Russia by persistent and successful resistance to becoming Russianised and Germanised respectively. The Polish victory in 1920 when, unaided, she rolled back the Russian hordes, thereby saving Europe from Bolshevism and once more proving her historical role of the defender of European civilisation, is not mentioned by Professor Bonn.

It is an historical fact that from the beginning of the nineteenth century until well after the outbreak of the second war, Germany and Russia were on the best of terms. Catherine the Great was a German, a large proportion of the Russian ruling class and aristocracy was of German extraction, and the two countries between them had amicably partitioned Poland in the past and again as recently as 1939. Germany has been steadily contributing for well over a century to the development of Russian industry and, but for Russian help, encouragement, and co-operation, Hitler could not have

re-armed Germany and started the war in 1939. Even now a powerful and ever-growing section of the German public opinion openly advocates a more than close understanding with Russia.

The only exception to all this was the conflict of 1914-1918, but a deliberate German desire to contain Russia was not one of the reasons which led to its outbreak.

With regard to the second point, the partitioning of Germany was the direct outcome of the desire on the part of the Western Powers and the U.S.A. to be on good terms with Russia owing to their complete ignorance of Russian aims and ambitions combined with a complete disregard of pledges and guarantees. It certainly was not a deliberate act.

Concerning the recent reference to the 'German territories at present occupied by Poland', in all fairness we ought to remember that all those regions were given to Poland by the Allies in exchange for the eastern parts of Poland which Britain and the U.S.A. ceded to Russia. A similar mistake is made by Terence

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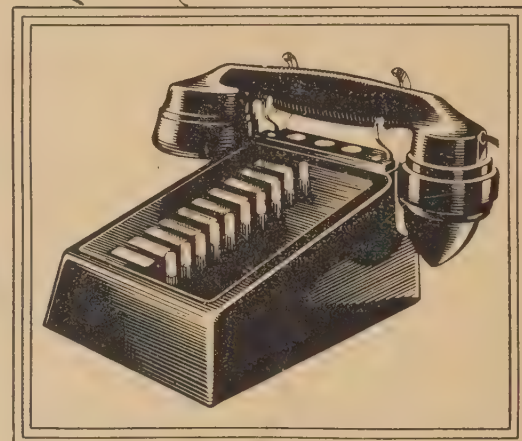
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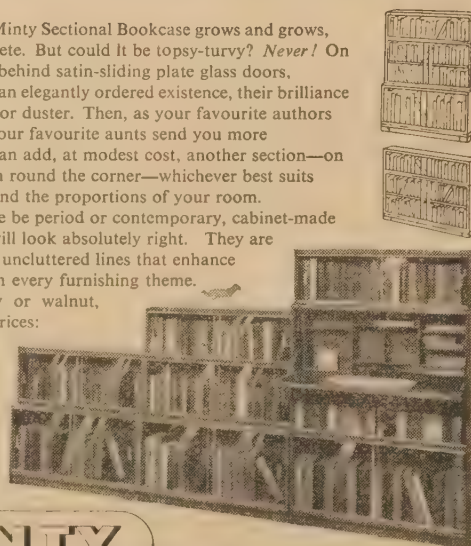


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Prittie who piously hopes that as soon as we begin to trust Germany and admit her into our community she will become the proverbial 'Fairy Prince'.

Experiences of people like the Danes of South Slesvig and the Poles under the German occupation between approximately 1800 and 1914, who had to endure inhuman, brutal German oppression and treatment of the utmost barbarity—there was no Hitler in those days—suggest that such a hope is only another example of wishful thinking.

The delirious enthusiasm with which Rehmke's outbursts were greeted by the population, not all of whom could be accused of being Nazis, in spite of all 'official' repudiations suggests that the Germans are not ready to become partners in a European community.

The Poles learned to know and understand the Germans and the Russians in the school of bitter experience. Their warnings against the consequences of an appeasement of Russia went unheeded—with what results, is now only too obvious. They are now warning us against an appeasement of Germany! Wake up, Europe, before it is too late.—Yours, etc.,

DOUGLAS L. SAVORY

House of Commons, S.W.1

Man and Energy

Sir,—In his first talk on 'Man and Energy' Professor A. R. Ubbelohde states 'the 5,000 inhabitants of Achill Island, off the West Coast of Ireland, have so far nearly all refused to have an electricity supply'. Had Professor Ubbelohde taken the trouble to verify this statement he would have found that the facts do not confirm it. He would have learned that the extension of electricity supply to Achill began only a few months ago and that the construction of the networks has yet to be completed.

Out of 1,100 houses which it is possible to supply, applications for electricity have been received from 810. Of these 500 are, at the time of writing, connected.

Professor Ubbelohde would also have known, had he visited Achill or otherwise made inquiries, that the users of electricity in Achill are buying radios, electric cookers, kettles, irons, washing machines, and water boilers.

Yours, etc.,

E. A. LAWLER,

Dublin

Public Relations Department
Electric Supply Board

Meta-philosophy

Sir,—My book *Other Minds* is reviewed in *THE LISTENER* (December 4) under the heading 'Meta-philosophy'. A reader will naturally gather from this heading and from the review itself that the book is solely or mainly meta-philosophy, i.e., mainly about the nature of philosophy.

At the same time the reviewer, Professor Ryle, says that my 'theme-problem' is 'How can I know what goes on in your mind?', i.e., 'How can one settle questions about the mind of another?' This is a meta-question since it is a question about how certain questions are settled. But it is not a meta-philosophical question. For it is not about philosophical questions. It is about such questions as 'Are you pleased?' 'Do you love me?' If we call these psychological questions we may say that the philosophical question, 'How can one, how does one settle questions about the mind of another?' is a meta-psychological question, just as 'How can one, how does one settle legal questions?' is a meta-legal question. But it is not a meta-philosophical question. So if Ryle is right as to what my theme-problem is, my theme-problem is not meta-philosophical.

And he is right—my theme-problem is 'Do

we know, can we know, how do we know the mind of another?' This, as he says, is a perfect specimen of 'examination-philosophy'. This was Wittgenstein's theme when he said 'We have the idea that the soul is a little man within'. It was Ryle's theme when he wrote in his well known *Concept of Mind* of the ghost in the machine. We have all three worked at this philosophical, not meta-philosophical, question. And even with Wittgenstein's help I found the going rough, to use Ryle's metaphor. So I did when, like Wittgenstein and Ryle, I worked on the related theme 'How does one know what is going on in one's own mind?' (p. 119). So I did when I tried to deal with the philosophical questions 'How does one know the future?' (pp. 131-191), 'How does one know anything beyond how things seem at the moment?', 'How does one know anything?' (pp. 131-191 and 236-247).

Why does Ryle inconsistently give the impression that *Other Minds* is meta-philosophy? Partly because in part it is. I do say things about the character of philosophical disputes—see, for example, footnotes to pp. 1 and 4 and pp. 247-259. More—I am concerned while engaging in philosophical disputes to bring out their character. And in part Ryle's mistake arises, I believe, from confusion—confusion which arises from the following circumstances: When I present the reasons for rival answers to philosophical questions it appears that they are meta-questions. This doesn't make them meta-philosophical. It also appears, as Ryle so well suggests, that they are a species of those questions which can't be answered 'Yes' or 'No'. This doesn't make them meta-philosophical. But it tempts one to say they are verbal. I succumb to this temptation on p. 145. It is a subtle and enormous error. Even if they were verbal this wouldn't make them meta-philosophical. But it is tempting to say of one who thinks (a) that philosophical questions are verbal, or even (b) that philosophical questions can't be answered by 'Yes' or 'No', that he thinks that the only interesting response to a philosophical question is a comment on the character of that question, a comment to the effect that it 'hasn't an answer Yes or No', 'isn't a genuine question', 'is only a verbal question'.

'1'. Contrary to p. 145 most questions which can't be answered 'Yes' or 'No' are not verbal. Those legal questions which can't be answered 'Yes' or 'No' are not verbal. (See Smith v. Baker, 1891, A.C. 325 and *The Law Quarterly Review*, April 1945, 'Wrong Turns in the Volens Cases' by D. M. Gordon). Even philosophical questions which can't be answered 'Yes' or 'No' are not verbal. (See *Other Minds*, p. 247). '2'. It is not true that the only interesting response to questions which can't be answered 'Yes' or 'No' is a comment on their character. The interesting response is to present the case for the answer 'Yes' and to present the case for the answer 'No'. That is what we pay lawyers for. That's what's done in *Other Minds*.—Yours, etc.,

Cambridge

JOHN WISDOM

Nationalised Industries and the State

Sir,—I wonder if many readers of *Problems of Nationalised Industries* would agree with Lord Eustace Percy's comment (*THE LISTENER*, December 11) that the inclusion of my essay on nationalisation and scientific research encourages 'the assumption that the normal destiny of the highly trained technologist is to occupy a back-room in a research establishment, or perhaps in a ministry in London, divorced from the actual responsibilities of production... the sort of "brass hat" assumption which puts this country at a disadvantage in comparison with the United States'.

If such is the impression created by this essay in context with the others, I could heartily desire it to be withdrawn from their company. But I do not think this should be necessary. 'It is important', says the essay, 'that any organisation adopted for research for the nationalised industries should remove some of the old barriers between the sphere of knowledge and the world of use. One way of doing this is to ensure that the voice of science is more often combined with the voice of authority. The view dies hard that the scientist is just another expert who can be kept "in the back room" or somewhere else "on tap", and called on to give advice when required. The truth is... that sometimes only the scientist himself will be able to identify those problems where his methods are fruitful and his advice is required'.

In the face of this and similar statements in the essay, how can Lord Eustace Percy maintain his point? Only by insisting on an un-American distinction between the 'industrial scientist' and the 'highly trained technologist'. This is not a distinction which he would probably care to defend, and he will find little support for it in the essay.—Yours, etc.,

Oxford

EDMUND DEWS

Naturalism in the Theatre

Sir,—Mr. Charles Davy talks (*THE LISTENER*, December 18) of confusing 'a style of play-writing with a method of staging', as though the two things were not virtually inseparable. The architectural properties of the playhouse have a great influence on the style of writing; and, to a lesser degree, vice versa. The Elizabethan dramatists wrote plays for performance at the Globe and Fortune, on whose open stages they had a flow impossible to reproduce behind a proscenium. Ibsen and his disciples wrote plays, the naturalism of which it would be equally impossible to realise on an open stage.

But, as Michel St. Denis said, naturalism died in 1920. Minor playwrights still dabble in it; but major dramatists are seeking new means of expression. Some of us feel that this new form will be expedited by putting into physical effect a feeling that has been at work for several years—the need to make closer contact possible between the actor and his audience. This will never be attained while the proscenium stands, an iron curtain, creating cold war and isolation.

Mr. Davy truly says that one may see anything through a keyhole; but what an objective view it is! Why encourage an audience of 'peeping Toms' when, by knocking down the door, it is feasible for us to join together in a dramatic experience, the warmth and intensity of which may surprise the cold, detached outsider who is accustomed to looking at rather than sharing in a play?—Yours, etc.,

London, W.5

PAUL BEDFORD

The Burge Memorial Lecture on *Race Problems in South Africa*, which was given at Westminster School by T. J. Haarhoff, Professor of Classics in the University of Witwatersrand, Johannesburg, has been published by the S.C.M. Press, price 2s. The Stamp Memorial Lecture for 1952 on *Economic Stability in the Modern World*, which was delivered at the University of London by John H. Williams, Nathaniel Ropes Professor of Political Economy in Harvard University, has been published by the Athlone Press, at 2s. 6d. Under the title *The Problem of Capital for British Industry* (Industrial Co-Partnership Association, 2s.), Mr. S. P. Chambers has published an address which he gave recently together with an explanation of the aims of the Association. Mr. Chambers concludes that 'We just cannot go on in this country putting less and less capital into industry and expecting British productivity to rise, and somehow or other keep up to American standards'.

Recollections of Benedetto Croce

By GUIDO CALOGERO

THE first occasion on which I heard of the existence of Benedetto Croce was not a very creditable one to my school teachers. It was in 1920. I was fifteen, and in my school in Rome no teacher had ever mentioned him. One day a school friend of mine, Enzo Sereni, told me: 'You must read Croce: he is a better writer than Carducci, and more intelligent'. I had a great admiration for that friend, who later on was to become a distinguished Zionist. In 1944 he returned to Italy to help in the Resistance, was captured by the Nazis, and died in Dachau. As a boy I considered him more experienced than myself in many fields, and sometimes I was sorry not to be a Jew myself, so that I could follow him in his adventures, and become a settler in Israel. But at least I followed his advice, and began to read Croce.

The fact that I had been made to read him by a school friend and not by a teacher was not at all unusual. By 1920 Croce was already a man of fifty-four, whose cultural leadership was widely acknowledged. But this recognition came more from the educated public and private scholars than from the professional philosophers, more from the students than from the professors. Croce himself, heir to a rich family from the old Kingdom of Naples, was not exactly in love with the academic world. He had left Rome University without taking a degree, and never wanted to become a professor. So it took some time before academic circles became used to considering him a professional authority, instead of merely a sort of high-powered journalist who had somehow contrived to be more successful than they. When I had to write my thesis, I went to the Professor of Greek of my university and explained that I wanted to do a critical examination of Pindar's poetry, according to the method of aesthetic criticism which had been so successfully applied to modern poetry by Francesco de Sanctis and Benedetto Croce. He cut me short, telling me that Croce was corrupting the minds of all the young in Italy.

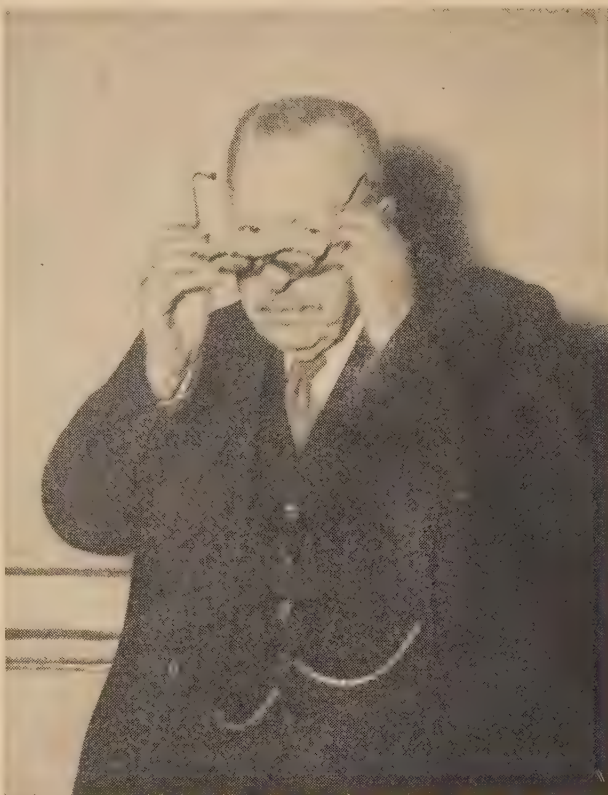
Without realising it, this professor of Greek was saying about Croce much the same thing that many Athenians had said about Socrates twenty-four centuries earlier. The fascination which Croce exerted over the new generation of Italian scholars was almost uncanny. Socrates had charmed his young followers by defeating, through the dialogue, the most celebrated debaters of his time, one by one: Croce quickly acquired a reputation all over Italy when in 1903 he started his review *La Critica*, with the clear purpose of submitting Italian cultural life to his critical judgment. Thus he became a kind of champion of the mind, who unremittingly defeated every opponent whom he liked to choose; young people gazed at this spectacle in a pleased and applauding mood, trying to follow his methods in order to get similar results. His favourable judgment was eagerly sought as a sort of knightly investiture on the field of literary and philosophical criticism.

I remember the occasion when I sent him the first article I ever published: I had tried to interpret in a wider sense his definition of Carducci, the 'great Italian nineteenth-century poet, as a 'poet of history'. He replied almost at once on a postcard with a few appre-

ciative words. He said how pleased he was that I had studied Carducci, whose humanity and poetry he admired very much, whereas the more decadent schools of contemporary Italian culture affected to ignore him. I think the most wonderful love letter could not have given me greater pleasure, even at a time when I had not yet received any. I never forgot that letter, even when, in later years, I had some harsh and sometimes painful polemical encounters with him. I think the memory of his holding out a friendly hand to the young beginner was

one of the reasons which for ever after prevented me from abandoning, in front of him, the reverent attitude of a disciple, even when I came to think his later opposition to the development of my philosophical thought unjust.

Normally Croce lived and worked in his old palazzo in Naples, according to a very strict time-table and with plans fixed well in advance: but from time to time he ventured forth to visit the archives or the library of another town, or just to see friends, and this invariably turned into a social event to whichever town his journey took him. In fact interest in his travels grew steadily the more the hostility of the fascist regime prevented the newspapers from writing about him. To all those who saw in him the champion and symbol of the fight against fascism, his arrival became something like the visits of St. Paul to his fellow churchmen. To be his host was a special honour, and the invitations to meet him at the evening parties given by some of his oldest friends were eagerly sought for even by those whose courage failed them at the last moment and who had to seek refuge from the dilemma in a sudden cold. In such gatherings a strange scene repeated itself every time: I remember a friend excelling at a kind of pantomime performance of it, which rivalled Plato's famous description of



Signor Benedetto Croce, who died last month at the age of eighty-six

people listening to Protagoras, eager to catch a new and even closer position every time that the sophist turned round in his walk up and down the courtyard of Callias. Here, at the parties, everybody's sole interest was to listen to Croce, who was, indeed, a brilliant conversationalist and a formidable teller of anecdotes and witty stories, through which he liked to express many of his judgments and even some of his theories. So a thick crowd of standing onlookers massed every time around the small figure of Croce; those furthest away pretending to make light conversation amongst themselves, while at the same time trying, by quick and adroit movements, to get closer and closer to Croce himself until, suddenly, Croce would move to another part of the room to avoid the congestion and the same process began all over again.

The morning after one such gathering in Florence, we left for San Gimignano in two cars. The party included Croce, his eldest daughter Elena, and a number of his closest Florentine friends. To see Croce getting into a car was amusing and in a way illuminating. He did not adopt the usual device of entering it sideways: he simply approached the door frontally in the same way as he might enter the wide gate of his palazzo in Naples. Naturally any car seemed too small for him, who was so small himself. Indeed, he completely lacked any interest in the technical side of things, in machines or inventions. He neither hated

them like D. H. Lawrence, nor despised them like Plato, but probably went on, all through his life, considering the expanding world of modern technique with the same humorous detachment with which, in his younger years, he had fought his philosophical battle against positivism. He used to scorn the shallow assuredness of the positivists by pretending to believe in superstitions and by wearing apotropaic charms against the evil eye. Towards the end of that day, walking along the narrow lanes of San Gimignano, we lost sight of him completely. We searched and searched for him, and when at last we found him he was standing by a small fountain holding one foot after the other under the jet of icy water. His daughter rushed to the rescue, but he said calmly: 'You know we are dining with the Marchesa So-and-So, don't you? Now, how could I go there with such dirty shoes? Let me wash the mud off'. Obviously a man who could do things so simply had not much use for elaborate techniques.

But as to the technique of mental work, how he had mastered its tools: especially his memory! Thinking of Croce was for me one way of understanding why the Greeks regarded all the Muses as daughters of Mnemosyne. However, it is also true that this formidable memory seemed in certain cases to be a kind of chain, which kept him too much bound to the past. Life, after all, needs oblivion no less than memory. One of the less peaceful meetings I had with him was during the war, between 1940 and 1941, when I took him the draft of a clandestine manifesto, which had been prepared as a result of lengthy discussions in our group of anti-fascists. It expressed much the same political ideas as had been embodied by Carlo Rosselli in his movement *Giustizia e Libertà*, and which later on inspired the Action Party.

Croce was not happy about the pamphlet. In particular he objected to the tenet that social justice was no less essential to political freedom than political freedom was to social justice. From the philosophical point of view, he maintained that freedom could never be subordinated to any other idea or ideal. In his own political views he certainly no longer believed, with the old Italian liberals, that land ownership was the only sound basis for the formation of an impartial and public-spirited ruling class; but, at the same time, he could not help remembering that all the quiet and comfortable work of his life had been made possible by the rent of his estates in the Abruzzi and Apulia which had belonged to his family for so many generations. Theoretically, he was not against social reforms; practically, he feared their being adopted in a hurry, and insisted that Italy's first need was the restoration of political freedom and constitutional life. I certainly did not deny the necessity for all this, but I took the view (which later on, I think, proved correct) that many Italians, of all classes, might become communists if a liberal type of socialism failed to give Italy what Great Britain, for instance, had enjoyed: the development of social equality within the framework of political liberty. The argument between us became more and more excited. Suddenly Croce asked me: 'Tell me, how did you develop such a strong interest in politics? The first time you came to see me, sixteen years ago, you told me that your most ardent desire was to get on with your studies in Greek philosophy, even if the political struggle following the coming of fascism might not allow such philosophical otia. At that time I had to warn you that no man could escape politics, lest politics would disturb him in the very heart of his private life'. 'Well', I could only answer, 'that means, at least, that I have learned something from you'. But his amazing memory had been right again. I had forgotten my juvenile words. He had not.

This way of nailing men to their past was regarded, even by some of his friends, as one aspect of what could be called a kind of feudal intolerance, a shrinking from even the possibility of admitting error. Throughout the sixty volumes of his works, he certainly corrected and changed some of his views, but he always considered those changes more as a necessary development of his previous thought than as a correction of mistakes. When, in the very last period of his life, he openly admitted that he had had to correct his judgment on Manzoni's *I Promessi Sposi*, the event appeared so exceptional that literary critics are still discussing it in the newspapers. Croce, the leader of liberal thought in Italy, was himself, in that sense, not a very liberal-minded man: but in saying this one has to remember that Rousseau's contribution to the theory of education is not essentially invalidated by the fact that he himself was a very bad father.

This is not the moment to assess Croce's gigantic contribution to Italian cultural life over more than half a century. Let us content ourselves with saying that, above his works, there was his way of working; above his theories, his peculiar frame of mind. He was a rich man: yet he worked day after day, unremittently, until the very last minute

of his life, as hard as the humblest labourer on his estates. He was a sad man—his early adult life stood under the shadow of the sudden extinction of his whole family in the earthquake of Casamicciola, and even the fragment of his diaries which has been published reveals a melancholic mind; yet his view of the world was frequently permeated by a keen sense of humour, which found its most typical expression in his masterly skill of story telling. It is a pity that the best of his stories cannot be quoted here; they are of the kind which is proper for gentlemen only if no lady is present. But I shall always remember an occasion just after the liberation, when Croce was one of the most influential members of the new Italian Government. I can still see the little old figure slowly descending the big staircase in a Roman hotel, chatting animatedly with a group of friends. Suddenly he stopped and looked carefully around, to make sure that nobody else could hear him. How lovely to see the grand old man—whom the Italians would call the *venerando vegliardo*—enjoying himself in telling his friends a wonderful obscene story about the private life of a King of Naples, being very careful at the same time that nobody, outside his little circle, could understand his Neapolitan dialect!

I wonder if such light-hearted recollections are in order on the grievous occasion of the death of Benedetto Croce. But let me apologise by quoting the words with which another Italian scholar, Giorgio Pasquali, who also died a few months ago, ended his obituary of his great German master, Ulrich von Wilamowitz. Fearing that he had perhaps brought his listeners more to laugh than to cry, he repeated the ancient motto: 'In the house of the Muses there is no place for tears'.—*Third Programme*

There is a joke in America to the effect that, since books are popular that deal with dogs, doctors, or Abraham Lincoln, a fortune awaits the author of a work on Lincoln's doctor's dog. There are indeed so many books about Lincoln that one must ask of *Lincoln and his Generals*, by T. Harry Williams (Hamish Hamilton, 21s.), whether it was worth doing. For another Williams (Kenneth P.) has recently published two volumes of a similar study. Moreover, some of the contentions of *Lincoln and his Generals*—e.g., that Lincoln was a better general than even Grant, and Grant than Lee—were developed years ago by other historians. Even so, Mr. Williams' book was worth doing. He has digested a vast amount of source-material, and really digested it; his book is brisk, economical and sure, both when he discusses the personalities of Lincoln and the procession of Union generals, and when he examines the ambiguities of leadership at a time of civil war, where a civilian commander-in-chief with no precedents to guide him had to forge a satisfactory chain of command. Mr. Williams presents an extremely convincing picture of Lincoln as a modest, patient President, who made mistakes (as when he withdrew McClellan's army after the Seven Days); who learned rapidly from experience; and who gladly surrendered his military burden when he found in Grant a leader who suited him. If Stanton, Lincoln's secretary of war, is left in the background, this was perhaps inevitable in view of the scope of the book. *Lincoln and his Generals*, with its lucid introduction by D. W. Brogan, is an analysis of heartbreak all the more telling for its matter-of-factness.

Holy Places

Azure is Love's abyss, and the bright Lily
The silver Demigod brought down to earth,
Beside the dreaming wells and crystal pools,
To set it in the hand of the young Maiden,
Born to redeem the world of knaves and fools

By being Mother of the Uncreated,
Was planted afterwards in a pure country,
Pale as the rose of dawn's most tender hour,
Beneath a sky of ever-shining turquoise:
The virgin land was lovely as the flower.

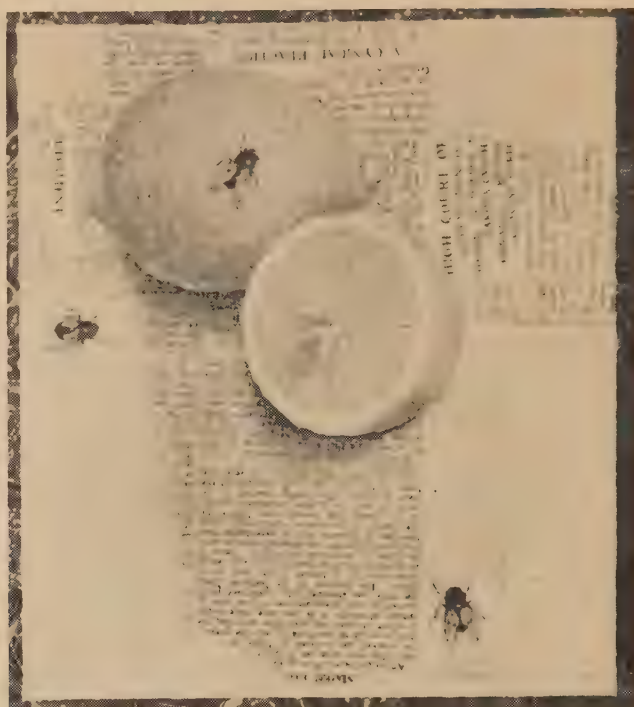
Psyche alone is Holy Land, the country
Over which stars rise in the dim gray sky,
Waxing and waning through the dewy night
In shining strange constellations: there alone
Are hills by the beloved Footsteps trod,
And there is Lebanon, with her snow and cedars,
And there Jerusalem, with the Grave of God . . .

WILFRED ROWLAND CHILDE

Four London Art Galleries



'Acrobats' (1923), a pen-drawing by Picasso, from the winter exhibition of drawings at the Beaux Arts Gallery



'Still life, November 1952, 1', from the watercolours, 'Trompe L'Œils and Flowers', by Richard Chopping, at the Hanover Gallery



'Humming Birds', from the pen-and-ink drawings by 'Scottie' Wilson at Gimpel Fils, where pottery by James Tower is also to be seen



'Femme en Corset: Conquête de Passage', by Toulouse-Lautrec, from the lithographs by French Masters at Marlborough Fine Art, Ltd.

Edwin Drood and Governor Eyre

By K. J. FIELDING

IN considering *Edwin Drood*, attention has always been so attracted by the unfinished half of the story that much of the published part has been passed over. It was always intended to be a mystery, but it contains other problems besides those of the plot. It shows a new development in Dickens' practice, but it is far from being as exceptional as sometimes supposed. For although the story appears to be continually reaching out to the climax at which it never arrived, it is still strongly marked by Dickens' old concern for commenting on public affairs. It may at first seem to be merely a self-contained mystery-novel, limited to the little worlds of Cloisterham and Staple Inn, but it also contains at least one chapter that directly refers to a famous controversy of the 'sixties, one that split the leading scientists and literary men into two camps which raged against each other bitterly for several years.

An Execution and an Enquiry

Briefly, my suggestion is that in writing chapter seventeen in *Edwin Drood*—in which Mr. Crisparkle has a violent dispute with Mr. Honeythunder—Dickens was referring to the Governor Eyre controversy which followed a notorious massacre in Jamaica. The trouble had begun with a riot in October 1865, when a number of local police and some European residents were killed. The authorities panicked; martial law was proclaimed; between 400 and 500 Jamaicans were shot: more than 600 men and women were flogged with whips, and many more were imprisoned. As well as these more general measures the leading Jamaican representative, George William Gordon, was singled out for execution. The subsequent commission of enquiry showed that his trial and arrest were equally illegal in almost every respect.

In England the news was received either with rejoicing that a dangerous rising should have been quelled, or horror that such savage means should have been used to put down what was no more than a minor riot. Gordon had been a prominent Baptist, and had a number of influential friends among the nonconformists; while the radicals and many Liberals, who had been disturbed by measures taken to suppress the Indian Mutiny, determined to take vigorous action. A Jamaica Committee was started by the Anti-Slavery Society, which eventually came under the chairmanship of John Stuart Mill. He was joined on the committee, or supported in principle, by Professor Huxley, Professor Goldwin Smith, Professor Fawcett, John Morley, F. D. Maurice, Charles Darwin, John Bright, Thomas Hughes, and many others equally well known. As a result of their demands a Commission of Enquiry was sent out to investigate; and as soon as its report was published the committee announced that if Eyre ever returned to England they would see to it that he was prosecuted for murder.

On this the controversy reached a new intensity. An Eyre Defence Committee was started, of which Carlyle became the leading spirit, actively supported by Ruskin and Kingsley, and tacitly by Tennyson and Dickens. Public opinion, in general, was pro-Eyre. Many men who disapproved of what had happened in Jamaica were not prepared to execute its Governor; and it was said to be unfair that he should be attacked so bitterly without having the opportunity to reply. It is, moreover, perfectly true that not all the opponents of the Governor were entirely pure in principle. Many of the platform idealists of the committee, who were also opponents of capital punishment, were disturbed when they were met with cries of 'Hang him!' to the rhetorical question of what should be done with the ex-Governor.

In spite of this, Eyre landed in 1867. Persistent attempts were made to bring him to trial between 1867 and 1868, without success. In 1869 a test case was heard against him for damages on behalf of those who had suffered from his incompetence, or severity; but he was already protected by an act of indemnity. Therefore, although the outbreak in Jamaica had taken place as long ago as 1865, the affair remained a live issue at least until the end of 1869 when Dickens had started writing *Edwin Drood*.

So much for a very brief account of the case of Governor Eyre; and now for a consideration of whether, in view of what we know of Dickens' methods as a writer, it is even possible or likely, in itself, that

he may have been referring to it. Before going on to this I think I should explain that the kind of allusion I mean was possibly an unconscious one; and that it was not designed to draw the attention of the reader to the problem, as was his treatment of the Poor Law in *Oliver Twist*, for example, but probably passed unrecognised by most of his contemporary readers. My suggestion is that, although the argument between Mr. Crisparkle and Mr. Honeythunder is ostensibly about Neville Landless and the murder of Edwin Drood, Dickens' mind—as he wrote—was drawn towards the case of Governor Eyre and the massacre in Jamaica; and that, as he went on in this chapter, he was led into writing of one in the terms of the other.

In any other writer this would be extraordinary, but with Dickens such a practice is not in the least peculiar, but characteristic. It is not always realised, for example, that Daniel O'Connell was introduced into *Martin Chuzzlewit* as a 'certain Public Man in Ireland', simply because a few months before he had written to a Dublin newspaper about Dickens' *American Notes*. Henry Cole, the director of the Department of Practical Art, was the unidentified 'third gentleman' in the second chapter of *Hard Times*. Mortimer Grimshaw, one of the most prominent leaders of the great Preston strike, was the 'original' of the trade-union orator Slackbridge in the same novel, while Mrs. Jellyby was partly drawn from Mrs. Chisholm, the organiser of emigration to Australia. Some of these identifications are new, and almost all were unrecognisable to Dickens' contemporaries. Their purpose was not so much satire for the amusement of the readers, but because they delighted Dickens himself and stimulated his zest in writing. They are linked with his gift of mimicry, which is as evident in his skill as a writer as in his remarkable career as a public reader. Parody and pun always had a peculiar attraction for him.

In itself, therefore, such a reference is possible. It is known that Dickens strongly disapproved of the agitation against Eyre. It now only remains to be seen whether the suggestion that he was thinking of it in writing part of *Edwin Drood* is justified.

I am assuming that you have read the novel, and have at least a vague recollection of it. The scene in which I am chiefly interested is in chapter seventeen, when Mr. Crisparkle calls on Mr. Honeythunder at the offices of the Haven of Philanthropy in London. You may remember that this is just after the disappearance of Edwin Drood, and his assumed murder; and that Neville Landless is, with obvious injustice, generally regarded as responsible. Mr. Honeythunder used to be his guardian, but he has now been befriended by Mr. Crisparkle. Crisparkle is visiting Honeythunder on business connected with his former ward; but as far as the plot is concerned the story stands still for the whole chapter, and the business is dismissed in a line and a half.

Brilliant Sketch of an Impossible Person

Mr. Honeythunder is the key-figure to this incident, and he stands out as the only one in the novel who is introduced simply for the purpose of satire. As a character in himself he stands for everything that Dickens disliked and had frequently satirised before: as a member of the Peace Society—to which he is expressly said to belong—as a nonconformist, an advocate of complete abstinence, a platform speaker, and a 'professional philanthropist', he is a composite target of all that Dickens detested. He is not a stock figure or 'humour' but a brilliant sketch of, in every sense, a completely impossible person. He has no place whatsoever, therefore, in a novel which has turned so directly away from reformism and caricature and so sharply towards realism and plot.

Yet as far as he represents these old beliefs and principles in themselves he is not important. They are chiefly significant for their association with the case of Governor Eyre. It had been the most important cause to enlist the platform-speakers and 'professional philanthropists' for years; the Peace Society had taken a prominent part in demanding an enquiry; and the nonconformists, or Exeter Hall group—as I have explained—had protested particularly vigorously at the events in Jamaica. Honeythunder, I suggest, was intended to be representative of the members of the Jamaica Committee.

The main reason for thinking this, is that on coming to chapter seventeen it is at once apparent that it is written in a different tone or style from the remainder of the novel. To anyone familiar with the rest of Dickens' work there is no doubt that he is 'getting at' some person, association, or actual abuse. And after examining it closely it is clear that the only controversy which corresponds to what he had to say, was the case of Governor Eyre. It is ultimately on the evidence of the style that this suggestion rests. There are a number of other allusions which seem to support it—to which I want to refer—but by themselves they would be of little importance.

Allusive Method—Definite Manner

The chief characteristic of Dickens' satire of this kind is its combination of an allusive method with a definite manner: it is at once hard and direct in expression, but uses pun and parody, far-fetched conceits and comparisons, so that it never quite breaks through from fiction into everyday reality. The whole chapter is an example of this manner, yet perhaps the first two paragraphs will best give you an idea of what I mean. Mr. Crisparkle had been an amateur boxer in his time, and, on being kept waiting outside Mr. Honeythunder's office, he watches a number of philanthropists coming and going and thinks how like they are to some of the bruisers whom he had known in his youth:

... The Professing Philanthropists were uncommonly like the Pugilists. In the development of all those organs which constitute, or attend, a propensity to 'pitch into' your fellow creatures, the Philanthropists were remarkably favoured. There were several Professors passing in and out, with exactly the aggressive air upon them of being ready for a turn-up with any Novice who might happen to be on hand; that Mr. Crisparkle well remembered in the circles of the Fancy. Preparations were in progress for a moral little Mill somewhere on the rural circuit, and other Professors were backing this or that Heavy-Weight as good for such or such speech-making hits, so very much after the manner of the sporting publicans, that the intended Resolutions might have been Rounds. ... There were only three conditions of resemblance wanting between these Professors and those. Firstly, the Philanthropists were in very bad training. ... Secondly, the Philanthropists had not the good temper of the Pugilists, and used worse language. Thirdly, their fighting code stood in great need of revision, as empowering them not only to bore their man to the ropes, but to bore him to the confines of distraction; also to hit him when he was down, hit him anywhere and anyhow, kick him, stamp upon him, gouge him, and maul him behind his back without mercy. In these last particulars the Professors of the Noble Art were much nobler than the Professors of Philanthropy.

In my opinion anyone familiar with Dickens' work should agree that the two last sentences at least certainly refer to a recent actual case in which so-called 'professing' philanthropists had viciously attacked someone behind his back who was unable to reply; and I suggest that there is only one man who fills these requirements. It must be remembered that what is said about philanthropists in general has nothing whatsoever to do with anything in the plot. I would prefer to think that, even subconsciously, Dickens did not intend to refer to the 'moral' John Stuart 'Mill', but it is not altogether impossible: in writing an article for *Household Words* about the activities of an Irish adventurer called Richard Dunn, Dickens entitled it 'Things That Cannot be Done'. And with Professor Huxley, Professor Goldwin Smith, Professor Fawcett, and the other university committee-members in mind, he was perfectly capable of meaning more by his reference to 'the Professors' than that there was an obscure resemblance between prize-fighters and 'professing philanthropists'.

If it is accepted that the argument between Honeythunder and Crisparkle mirrors the Eyre controversy, there is nothing far-fetched about these possibilities; and I put them forward as dependent suggestions, not as evidence in themselves. Similarly, I think it possible that in Mr. Honeythunder's outburst, during their argument, about 'Cain and Abel', Dickens was thinking of certain actual arguments and that the general style of his denunciation of 'murder' was intended to be in the manner of the many Baptist and nonconformist speakers who had addressed meetings all over the country about the massacre of the Jamaicans and Gordon's execution.

Finally, an additional reason for believing that this scene refers to more than the incidents in the novel is that it is not only written in a different style or manner but that the matter is equally inappropriate. Mr. Honeythunder, as I have suggested, was at first intended to be representative of the members of the Jamaica Committee as a whole. But it seems possible to me that, as he went on, Dickens may have had one of them increasingly in mind. If Mr. Honeythunder was intended to

refer to one of the committee more particularly than the rest, there are certain striking similarities with John Bright.

Bright was well known to be rude and brusque—in Honeythunder's manner—although his admirers called him candid and plain-spoken. He was a prominent member of the Peace Society, and notorious for denouncing war in a savagely aggressive manner. He was an oratorical pugilist. Nearly half the cartoons in which he featured about this time in *Punch* show him either with a clenched fist, or as an actual prize-fighter. He was essentially a nonconformist; he was in the forefront of the whole Jamaica controversy; was the committee's most powerful spokesman; and had sensationally denounced Eyre for Gordon's execution, declaring that 'Murder is foul, and political murder is foulest of all'. It would be by no means inconsistent with Dickens' usual practice in other affairs that he should have paid Bright the only public compliment he ever made him just at the same time he was writing the first chapters of this last novel.

It is all no more than a possibility; but however extraordinary it may seem, it is no more remarkable than the way in which Mrs. Jellyby was taken from Mrs. Chisholm, or the appearance of Henry Cole in *Hard Times*: yet for both these examples there is external evidence. If the theory is justified, its significance is another matter. It suggests that in method Dickens tended to revert to his old trick of commenting on public affairs even when writing a closely contrived mystery-novel. Its implications about his opinions are not new, although they are probably unfamiliar, and it might have been helpful if there had been time to say more about them: the more closely one considers Dickens' life and work the clearer it is that, although he was a humanitarian at heart, in principle he was a convinced authoritarian.—*Third Programme*

The Yellow Plum Tree

This tree has fished the sun,
played with its lines the air,
and from those depths has strung
its goldfish tasselled wear.

Caught by the dipping boughs
the goldfish fruit hold fast,
drag down the leafy prow,
bite at the tree's tall mast.

Savour and sap of gold,
the sugared coins and rings
glitter from each green fold,
as the tree's robe swings.

What Midas bird has pattered
amid these arching boughs?
Its eggs of amber scattered
about the green, dark house?

From what strange hive has flown
this golden hoard that swarms
like furred and clustered stone
on the bowed, creaking arms?

The tree fights with the storm,
wrestles the wind and rain;
held by its golden swarm,
racked by its harvest pain,

the branches bend and crack,
bare sinews and white bone
of the tree's broken back,
the glaring, splintered groan.

Cut down each broken branch,
saw sloping smooth the stem,
spread on thick paint to stanch
the sap bleeding like gum,

and wait for spring to thrust
the new growth green of boughs
that will in years disclose
once more their golden trust.

ALEXANDER HENDERSON

The Listener's Book Chronicle

Grandma Moses: My Life's History Edited by Otto Kaller.

André Deutsch. 21s.

IT IS DIFFICULT NOT to feel a certain scepticism and a certain dismay on opening such a book as this. Since the time when Henri Rousseau was 'discovered' by the *avant garde* of his day there has been no lack of *douaniers*—auto-didactic men of genius who are enthusiastically written up but who, for the most part, fail to go beyond the slight charm that can be found in almost any child's drawings and whose naivete is not always so unconscious as their backers would have us suppose. Anna Mary Robertson Moses has been publicised with so much transatlantic enthusiasm, such a wealth of nationwide ballyhoo, that one fears the worst, and Mr. Louis Bromfield writes an introduction of such intimacy, such warm humanity, and such an abundance of ill-considered commonplaces that the critic may well be tempted to declare the book unworthy of a review and to sell it for what it will fetch. In this, however, he would be wrong. Grandma Moses—to use the repellently homespun appellation that has been applied to her—can paint; her colours are both lively and subtle, she has a real understanding of movement and arrives, by her own limited means, at effects of atmosphere and distance which are much more than pretty. She is not ambitious, her aims hardly go beyond those of childhood, but within her limits she is accomplished and adult and can express the moods of nature very well. She is probably the best of those living American painters whose works have been made familiar in this country.

The autobiography is little more than the recorded chatter of an old lady of great charm and decided character, well endowed with that gift for terse humour which is characteristic of her nation. It may, at first sight, appear irrelevant though readable. It is not until the end of the book that she says anything about her painting, for it was not until the end of her life that she began to paint. She relates that which might be expected of any old countrywoman: stories of her childhood, some fascinating and others trivial, accounts of her early struggles on farms in Virginia and New York State, births, weddings and, in abundant detail, the illnesses and deaths of her family. Nevertheless the clue to the character of her painting is here. She was born, as she says, 'in the green meadows and wild woods on a farm in Washington County, in the year 1860'. At that time Washington County, which lies half way between Canada and New York, was considerably more primitive than were most parts of England. Communications were rudimentary, the farm was worked with oxen, and the nearest doctor was many hours away. The Moses family made its own soap and candles, it had no sewing machine, and its fire, which had to be kindled with flint

and steel, burned from year's end to year's end. Memories of the eighteenth century were still fresh in a countryside which had seen little change since the first settlers made their way inland from the coast. It was, in short, the kind of society in which minor works of art usually attain a high aesthetic standard. Mrs. Moses is the last painter of a pastoral civilisation which has almost vanished from the New World. Like many very old people she looks back to her childhood, finding all that she needs for her art

as part of the plan of unification of the Colonial Service, which the author has dealt with elsewhere, but briefly describes here. Much information is given on recruitment, training, and the prospects of a career in this important service, whose duties are multifarious.

He shows how the British police tradition has been adapted to the many different needs of colonial territories, and relates the building up of a tradition of their own which, when the British leave, will retain the fundamental conception of police forces as

organisations integrated with, not alien to, the communities which they serve, the agents of the community itself, not the agent of 'authority'. Creation and maintenance of informed public opinion on both the powers of the police, and the limitations on those powers, will be vital in this respect. Future possibilities, which must depend on the character and development of self-government, are discussed. The book is enlivened with much first-hand material, notable cases, and incidents.



'Moving Day' (1951), by Grandma Moses

From 'Grandma Moses: My Life's History'

in the unmechanised world of her youth. She sees nature as it was seen before the Renaissance, conceptually, almost without linear perspective and almost without modelling. Her figures are schematic and her colour is, in intention, local. 'I have looked at the snow . . . and I can see no blue, sometimes there is a little shadow, like the shadow of a tree, but that would be grey instead of blue, as I see it'. It is a curiosity, in the twentieth century, to find a gifted artist who perceives colour in this fashion. This record of her life and opinions is both charming and historically valuable.

The Colonial Police. By Sir Charles Jeffries. Max Parrish. 18s. 6d.

At a time when colonial police (especially in Kenya and Malaya) are much in the news, it is both salutary and instructive to be reminded of their proper function: to act impartially in the interests of the community as a whole, to preserve or re-establish the rule of law and order, to protect life, property, and the enjoyment of legal rights (Kikuyu need protection as much as Europeans), and to prevent breaches of the peace. Sir Charles traces the origins and early development of the Colonial police, and then describes the history and organisation of the forces of each colony. The police of each colonial territory are an organ of the central government, not, as here, split up into separate units under local authorities; the Colonial Police Service was constituted in 1936

Mozart in Salzburg

By Max Kenyon.

Putnam. 21s.

This is a most satisfactory work, a short treatise written skilfully and with authority. By confining himself to Mozart's life in Salzburg only and to the music written there the author might have been expected to run short of material. He could in fact have fabricated a book stuffed with dry detail or inflated with tedious gossip. He has done neither but has produced a diverting and entertaining study of Salzburg society and Mozart's place in it and an illuminating commentary on the music. The result is a book that will have to be kept at hand for reference and one that makes continually good reading.

It is divided up into twelve 'Salzburg Periods'. The first is a longish expanse from Mozart's birth, in the house in the Getreidegasse, until he was six. Then follow ten further sections dealing with his Salzburg life, separated by his tours abroad. The last begins with his return from Vienna with his wife and child and ends when he leaves finally for Munich, four years before his father, Leopold, dies in Salzburg, eight years before his own early death in Vienna.

While Mozart is away on tour continuity is given to this account by sketching in social and political events in Europe as they affected Salzburg and the city where Mozart was later to live, Vienna. Interest in the narrative increases as the material becomes richer with the child growing into the precociously mature genius and his music taking on that quality and character that still astonish posterity. It is here that Mr. Kenyon finds much that is interesting and something that is new to say, as, for example, in his illuminating disquisition on the influence upon Mozart's style of the varying techniques of clavichord, harpsichord, and pianoforte. He has manifestly studied far beyond the range of this

book and his mind has a European quality; which fact makes it the more strange that he should cling to Jupiter, that outmoded label for the last symphony. But his method is generally excellent, his observation acute, and his approach has the liveliness of an enthusiastic participator tempered but never chilled by the heedfulness of a scholar. From such a writer one can accept what otherwise might seem like fiction but which, one feels, has foundation in historic fact, such as the delicious picture of Leopold, the father, walking in Salzburg 'in his new English red-brown suit'. For by the time we have got there in the book we have had opportunity to admire the author's integrity and so to take this bright observation on trust. He is, incidentally, kinder to Leopold than most. He rehabilitates him grandly. So he does Mozart's hated Prince-Archbishop Colloredo. These are matters in a great degree of opinion. But Mr. Kenyon's opinion, palpably the outcome of serious attention and thought, cannot lightly be dismissed.

Arrow in the Blue. By Arthur Koestler.

Collins with Hamish Hamilton. 18s.

The autobiographical impulse that is so characteristic of the intellectuals of our time will no doubt one day be related to the prevailing economic and social conditions which are determining the general course of our culture. For the moment writers feel somewhat apologetic for indulging in an activity which can, so often with justice, be described as 'exhibitionist'. The trouble with exhibitionism is not so much that it is boring, but that it is embarrassing. By turns coy and gushing, falsely modest and outrageously boastful, the average autobiography ends by being a clinical document rather than an objective record. Good autobiographies are probably the rarest of all forms of good literature. Mr. Koestler has added to their number (or begun to, for this is the first of two or three projected volumes).

Mr. Koestler's success is due, in the first place, to a clearly conceived method, which allows him to see himself against a background of public events, events in which he has participated as actor or spectator; then to an unusual gift for psychological analysis; and finally to a professional style of writing which, while lacking in finer poetic overtones, always conveys his meaning with clarity and precision. The method may, for some readers, seem somewhat long-winded—political movements have to be explained, and whether it is a duelling fraternity at the University of Vienna, a collective farm in Palestine, or a trip to the North Pole in a Zeppelin, the picture has to be completed in all its objective detail. But the prose-style carries everything on light feet, and only our desire to get on with the author's own story sometimes leads to a slight impatience.

The self-analysis is direct, efficient, and without the slightest trace of the self-pity that ruins most experiments of this kind. But we already know, from a book like *Insight and Outlook*, that Mr. Koestler is an expert psychologist. If events had been arranged a little differently by destiny he might easily have become one of those analysts, which his native country (Hungary) produces in such numbers (along with economists, film directors, and fiddlers). There are two passages in the volume which are masterly—the first, three chapters on 'The Psychology of Conversion' and 'Rebellion and Faith'; the second, several pages (in a chapter entitled 'Portrait of the Author at Twenty-five') devoted to an analysis of his relationship to women. The distinction drawn between the rebel and the revolutionary is infinitely illuminating. 'What distinguishes the chronically indignant rebel from the earnest revolutionary is that the former is capable of changing causes, the latter is not.

The rebel turns his indignation now against this injustice, now against another; the revolutionary is a consistent hater who has invested all his powers of hatred in one object. The rebel always has a touch of the quixotic; the revolutionary is a bureaucrat of Utopia. The rebel is an enthusiast; the revolutionary, a fanatic'. Mr. Koestler was, of course, a rebel, which is the reason why he could leave the Communist Party once 'the God has failed'. But it is only the Conversion that is described in this volume: the Disillusion is reserved for the sequel.

Mr. Koestler deplores the 'cultural climate' (of the English-speaking world) which does not permit him to approach the question of sex as objectively as he is accustomed to approach political questions. Nevertheless, he manages to say some very intimate and revealing things. He belongs to the type that suffers from 'a glandular condition called absolutitis'. That is to say, he engages in a phantom chase for perfect love, and every woman he falls in love with is immediately transformed into a Helena. But the illusion never lasts for long. Objectivity intervenes, 'a destructive awareness of detail', and the illusion crumbles. But it has no sooner vanished than it returns again, with a different object but in the same pattern. And as Mr. Koestler ruefully concludes, 'the calories I spent on them would have sufficed for writing half a dozen novels'.

It might be objected that all this reveals an absence of moral sensibility. That Mr. Koestler has moral values of a very positive kind is evident from the attitude he adopts towards totalitarianism. It is a little difficult to see, from that part of his story so far told, how he would relate private virtues to public vices, and *vice versa*. But then, we are told, 'the distinction between true and false applies to ideas, not to emotions; an emotion may be cheap, but never untrue'. We are left with an uncomfortable feeling that it is not always easy to separate ideas from emotions.

The Essential R. B. Cunninghame Graham. Edited by Paul Bloomfield. Cape. 15s.

This year is the centenary of Cunninghame Graham's birth, and it was an excellent idea of Messrs. Cape to honour this magnificent individualist with an anthology of his work. Most readers are probably more familiar with him through Mr. Tschiffely's biography, *Don Roberto*, than through his own travel books, stories, and historical works, and in his excellent and witty introduction Mr. Paul Bloomfield whets our appetite for his anthology. He admits a certain prolixity, a roughness of language and shape, but does not feel this to matter overmuch. The first part of the book is taken up with a long extract from *Mogreb-el-Aksa*, describing how Cunninghame Graham and his Moroccan travelling companions were taken prisoner by the Kaid on their way to the holy city of Tarudant. It is a glorious piece of writing, amusing, full of human observation and containing long, entertaining digressions. It is in the tradition of the minor masterpieces of travel, a fine tradition in English literature.

This section certainly raises hopes, but unfortunately the rest of the book is very uneven, and none of it reaches the high level of 'The Prisoners of the Kaid'. The short stories, clearly based on actual happenings, aim towards art but never quite get there. Here, often, prolixity ruins them, and they are not written with sufficient panache to be saved. There is, nevertheless, some excellent stuff among them—and *A Hegira* is entirely successful. Here Cunninghame Graham describes his journey from Mexico City to Texas in charge of a mule train, the incidents on the road, and the possibility of an attack by some Apache Indians on

their way to their own lands in the north after their escape from Mexico City, where they had been imprisoned for insurrection.

In the final section of the book Mr. Bloomfield has printed passages from the 'Latin American Histories'. Cunninghame Graham was, above all, a man of action, and it is difficult to imagine him at the hard work of the scholar. One would expect these books to be impressionistic, the work of a man in love with a country and who has read into its past to make his love still deeper. This is what they are, but they never convey any sense of historical excitement. Prescott, ill and nearly blind, writing the history of Peru and Mexico—countries he could never hope to visit—thrills the imagination with his descriptions; Cunninghame Graham, who had travelled over the sierras and deserts of both countries does not.

Religion, Science and Human Crises

By Francis L. K. Hsu.

Routledge and Kegan Paul. 14s.

Health and Agriculture in China

By James Cameron Scott. Faber. 25s.

The purpose of Mr. Hsu's book is to show that the hard dividing line between religion and magic, which Frazer and other thinkers have seen and most people take for granted, is quite unreal. Mr. Hsu sees a 'magical flavour' in Christian rituals and even science is not free from it. The chief centre of his research was West Town, as he calls it, in Yunnan, where a cholera epidemic which spread all down the Burma Road raged for a month early in 1942. This was hailed by all as the work of the Wen God, god of epidemics, and Mr. Hsu gives a minute description of the elaborate public prayer meetings, paid for by general subscription, to entreat the superior gods to order the Wen God to sheathe his sword. With these the priests continually exhorted the people to repent of their sins which had angered the gods. Simultaneously, however, they distributed protective amulets; there was a general demand for 'fairly water'; and some families hung out dragons stuffed with straw and draped with red flags. Meanwhile the police had enforced a clean-up of the town, medicines were administered, some people bravely underwent painful anti-cholera injections at the missionary college. When the plague was stayed Mr. Hsu questioned several West Towners on what they thought of this mixture of religion, science, and magic. The upshot of feeling was that the prayer meetings were as efficacious as ever (had not the gods sent torrential rains after the last meeting which washed away the cholera?) but amulets, fairy water, etc., were good, too. It was as well to be prepared at all points.

Mr. Hsu then turns his searchlight on America, 'where science has become a Sacred Cow', where divers religions flourish, and yet where many believe in luck, charms, talismans, and horoscopes. The whole book is most interestingly written, with a multitude of curious details of Chinese practice in time of trouble.

With the grim fact before us that while the world's population increases its food production decreases, Mr. Scott's book has a far wider application than to the country with which it chiefly deals. It describes the researches by a brilliant young American scientist Mr. Gerald Winfield and the author at Cheeloo University, Tsinanfu, in north-east China, into peasant methods of fertilisation by human waste, which are common all over Asia but perhaps most conspicuous in China. Mr. Scott gives an appalling list of sixteen intestinal diseases, from cholera to hookworm, caused by these methods.

The important point to notice is that the Chinese farmer's methods are both the enemy

of public health and extremely wasteful of valuable material, which by scientific com-

posting could not only be rendered harmless but of world-wide benefit in resuscitating lands

which for one cause or another are either derelict or too poor to be worth working.

New Novels

A Bag of Stones. By John Hampson. Verschoyle. 12s. 6d.

The Man from Madura. By Leslie Gillespie. Boardman. 10s. 6d.

Two Adolescents. By Alberto Moravia. Seeker and Warburg. 12s. 6d.

ALL three books are in the 'realist' manner. That is to say, each describes what reads like a scene of real life in a factual—in the case of Moravia an almost scientific—manner. Yet skilled and admirable as is the writing of Moravia and John Hampson, each leaves us dissatisfied, with the feeling that the facts which they so truthfully represent cheat us out of some further truth. Mr. Leslie Gillespie in this, his first novel, has perhaps written a more serious book than either of the others.

The realistic genre succeeds when it grasps the material or psychological forces moving through behaviour. Balzac is great because of the energy of the Balzacian motives. Economic aims, ambition, desire, and the *idée fixe* are a kind of blood pulsing through his books.

The realistic method must not just float on the surface of reality. It must plunge to the bottom and drag up the guilty motive. Virginia Woolf thought that the realistic method was inappropriate to our time. Planes were too shifting, motives too complicated, sensibility too brittle. It is dangerous to argue that a particular approach cannot produce fertile results at a particular time. All the same, the novels under review tend to show that realism is most fruitful when it deals, as in Mr. Gillespie's novel, with situations in which social motives move rather elementally and crudely through the lives of individuals. With Mr. Hampson one feels that his approach is not complex enough for his material. With Moravia one certainly cannot complain of lack of complexity and subtlety; all the same he creates a clear hard surface with his own professional skill under which life, although clear and luminous, seems frozen: like a leaf enclosed in a sheaf of ice.

Mr. Hampson's hero, Joseph Hadden, we first meet as a small boy living in a small heaven of childhood with his mother, shortly after 'the war' (the first world war is presumably intended). Into this heaven there breaks Joseph's father, 'this big selfish bully', mentally and morally little better than a moron. From the moment of his father's return, Joseph's heaven is changed into unrelieved hell. Once or twice he escapes from the torment of home to the family of relatives who treat their son as a human being. This gives him a glimpse of a life better than his own, but it does not serve to save him. When he grows up, Joseph marries a young schoolmistress, but too late. He is unable to work at a job, and the young couple are forced finally to go back to Joseph's home, where Joseph becomes infuriated to the point of madness, and murders his father.

In real life this is the kind of story one hears and accepts as true. And one is tempted to think that Mr. Hampson's justification for creating a plot which artistically seems overweighted with factors working against his hero, is that he is describing some situation from real life which has burdened his mind so that he has to get rid of it. In literature, though, there is always the difficulty that the novelist is inventing a story; and the fact that the invention may be 'drawn from life' does not prevent the reader resisting the novelist's portrayal of a victim conditioned by circumstances to be unable to put up any resistance to them. Mr. Hampson is using the novel here to draw attention to a case history

of someone who might have been a better man if he had been treated otherwise. In doing so we are impressed by the truth in a way which leaves us wondering what we can do about it. I think that the story of Joseph Hadden to some extent enlarges one's sympathies, and that is something to be grateful for. But as a novel it fails because in drawing attention to repressed life, it does not create enough life of its own. It is as though the writer himself had had some of his vitality sapped by contemplating Joseph Hadden.

A Bag of Stones is repetitious in a way excusable in a probation officer convincing a magistrate of the difficulties of one of his charges; but the reader of a novel does not need to be given example after example to appreciate that Albert Hadden is a bully. The symbolism of the stones which Joseph collects with the secret purpose of destroying his father as David killed Goliath, is merely morbid. One wishes that Mr. Hampson had let in far more outer air and light on to his stifling lives. Altogether this is a book for readers interested in an admirably constructed psychological 'case' history, but it fails to achieve the life of a novel.

The Man From Madura is about a Eurasian, Victor Rafael, and his relationship with a young English medical officer, Duns. Rafael falls in love with a Mrs. Ford whose husband is 'missing' in the war, while his friend Duns takes up with an intelligent girl of the new India. The inter-relationship of the love lives of these two friends is admirably conceived, and the other relationships which branch out from these central affairs—that of Rafael with his colonel and of Duns with Rafael's brother—are natural and full of variety. Plot and characterisation are excellent in this book, which has a conception from which a really outstanding work might have been made. There are also flashes of truly poetic description and an impressive quantity of the atmosphere of India.

Somehow though all these elements fail to catch fire, except in a few scenes. Mr. Gillespie seems to have a difficulty in arranging the exits and entrances of his characters which is more easy to understand on the stage than in the novel, where after all it is not very difficult for a writer to get two characters alone away from other characters. Rafael's flame—Mrs. Ford—is a characterless bore, and there is too much uneven and rather pointless dialogue. Mr. Gillespie has an excellent grasp of all the angles and surfaces of his red-haired hero the Eurasian Rafael, and yet—almost astonishingly—he never seems to get inside his skin. This is a case of a book with an excellent idea illustrated by a great deal of feeling and knowledge, which suffers not so much from lack of pains as perhaps because the writer has not put his manuscript aside a few years and then re-written it. All the same, to read it is something of an experience. I cannot leave the subject without deploring the blatantly vulgar wrapper with which the publishers have tried to enhance its attractions. It will put off most intelligent readers from the work of an intelligent writer.

Moravia's two studies of adolescence have a strangely German quality, reminiscent of Thomas Mann. They are written with a consciousness of art crossed with a consciousness

of psychology which are perhaps too evident to the reader. Into this formidable mixture there is infused a tumescent sensuality which is extremely disturbing. It is difficult not to discover in the orgiastic descriptions of the carryings on of the boys on the bathing beach in the first of these stories 'Agostino' and in the scene where the governess incites Luca in the second, 'Disobedience', an element of lasciviousness which goes beyond the needs of art. It must be admitted though that Moravia's sensuality is really exciting: so much physical pleasure in fiction seems incurably dull. But to me it seems there is something suspect in Moravia's writing. Extremely calculated and contrived, I find it essentially second-rate. But the calculations and contrivances—the complete reliability of this writer's use of the unexpected—are captivating in the extreme.

'Agostino' is the story of a boy who is witness to the casual love affair of his mother with a young man she meets on holiday at the Lido. Unable to understand why his mother's interest suddenly becomes withdrawn from him, Agostino one day wanders away from her and comes to a place on the beach which is the resort of a troop of truly scarifying boys. He is taken over, bullied and shocked by these boys, who horrify and fascinate him. The brutally obscene drama of their everyday lives is an enactment to him of his mother's modish languors.

'Disobedience' is a still more interesting study. Luca is a boy who in adolescence is overcome by such a horror of himself, his family and his school, that he decides systematically to dissociate himself from living by a secret course of disobedience, a refusal to participate even in eating. He is won over to a certain interest in life by a governess's attempt to seduce him. Just when he has decided—or when his nature has decided against his own will—to visit the governess in her bedroom, she suddenly dies. Thus the idea of physical relationship becomes merged in his mind with the equally physical one of death. The mouth which kissed him is full of mud under the ground (an image which surely owes a good deal to Thomas Mann, this).

Both of Moravia's adolescents achieve a sort of liberation. They go through the phase of resisting the body and come to accept it. This is certainly very true to life, and there are things about adolescence which Moravia 'does' better than I have ever seen them done. For instance in 'Disobedience' he describes Luca's physical self-consciousness of his own body, which amounts almost to a feeling of its disintegration limb by limb. This seems to me the very vivid expression of an experience I knew well but had never before seen expressed. If Moravia does not seem great like Tolstoy, or Proust, or Forster, it is because he states a problem which goes far beyond the solution he offers to it. One does not feel that the discovery of sexual fulfilment in casual intercourse takes us as far as the life he describes needs to be taken. I have no idea what the required solution of these two stories of adolescents is—but I feel that a greater writer would have found it. Moravia seems too satisfied with exploiting his own gifts, which are, indeed, immense.

STEPHEN SPENDER

CRITIC ON THE HEARTH

Weekly comments on B.B.C. programmes by independent contributors

TELEVISION

Solid Fare

TELEVISION PROGRAMME-PLANNING has not only its difficulties but its mysteries. For example, Monday, December 15: '8 15. "The Royal Mint"; 9.30. "Matters of Medicine", a heavy factual load which the interpolation of a musical show did strangely little to lighten. I comment on this with consideration for the difficulties besetting the programme makers, whose business is concerned with control as well as with supply. Pursuing it, they can be held to maintain a reasonably and perhaps even remarkably good

assortment of public personalities is more flattering to the intelligence than most of them. 'Animal? Vegetable? Mineral?' admirably meets the formula which requires the mixing of information with entertainment in the right amounts. The result is a programme capable of sustaining



As seen by the viewer: from 'The Royal Mint'—an early Charles II coin; and the reducing machine used in striking new coins



'Leisure and Pleasure' on December 16: details from a carved bone Madonna and Child in the Victoria and Albert Museum

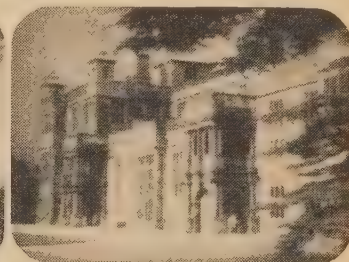
standard in the face of what is conceivably a startling shortage of material of the kind suited to rendering down into the still often inhibiting television limits. Two solid factual programmes in one evening was, all the same, a little too much like homework for some viewers, myself among them. I wondered, was it unavoidable?

The programme from the Royal Mint, typically preoccupied with the coinage of the new reign, had some instructive moments but they did not blend into a finely satisfactory viewing whole. Processes described in strictly professional tones by experts seldom come vividly to life for the outsider and there was scarcely an exception here. Like many such programmes, it was blurred by self-consciousness and the total effect was a little too close to that of an experiment by the School Broadcasting Council for the comfort of one's adult prejudices.

'Matters of Medicine' set out to show how casualties from burns in the home should be treated and, more explicitly still, that they are preventable. It communicated its very sensible message as painstakingly as could be, another example of television filling a useful social role. As a programme it was, I thought, too long. One could see many of the points it was trying to make well in advance of its making them. Though every part was relevant, it did not always appear to be, and I was left with the impression that the producer, Andrew Miller Jones, did not find his subject as congenial as some others which have drawn from him such very good work. No one can fairly challenge the good sense that was the essence of the programme but the edge was taken off its presentation by too many kindergarten touches.

Television's latest addition to the national parlour games now engrossing the time and talents of an almost weird

viewers. Completed by Goodhart-Rendel, who paid us the compliment of saying firmly 'no' when he didn't know, this was the ideal triumvirate for its purpose. One can only guess at the amount of running to and fro behind the scenes involved in organising these programmes, and the producer, Paul Johnstone, merits our good wishes in an enterprise of considerable promise if, till now, somewhat uneven performance. What it needs is the right permanent chairman. I rise to propose the name of



Interior and exterior views of Audley End, shown in 'Historic Houses of England' on December 12

Photographs: John Curns

Hulme Chedwick, who had guided the Lumbs through the series, was always a little too off-hand in style, possibly because he was anxious not to be. This was at no time first-class viewing in the pictorial sense. Again, though, it showed television trying to be helpful to the community, and who shall say that the effort was not worth while?

The big damping television failure of the fortnight was 'Any Questions?' and it was the questions that were its ruin, not its panel, and certainly not its chairman, Freddy Grisewood, paragon of platform amiability. The Harrow audience did not succeed in whipping up any real liveliness with their questions, and it is fair to the team to add that the cameras, roving over the body of the hall, showed us what appeared to be an extraordinary number of stern-jawed, set expressions, formidable to look at and perhaps more intimidating to the team than we knew. In fact, the level of discussion was never very high and it seems that 'Any Questions?' is, after all, one of those ideas which do not translate into the extra dimension.



George Cansdale with a bushbaby in 'Looking at Animals', televised on December 13

Then what about 'In the News'? It is one of the mysteries: for the moment we will be content to leave it at that, because I wish to put in a word for Philip Harben and his goose. His prefatory Christmas cooking lesson was perfectly given, his dissertation on the elementary rules of wine usage really helpful, though his enthusiasm for *zabaglione* was not precisely shared by me. 'I suppose', said McDonald Hobley at the close, 'that you wonder what happens to all the things Philip Harben cooks here in the studio. So do I'. I can answer his blithely professed ignorance. They go to 'the chaps on the floor', the camera crews, electricians, and the rest.

REGINALD POUND

BROADCAST DRAMA

Bees in the Bonnet

IT WAS ABOUT twenty minutes to nine one Monday evening that a speaker, on what Macbeth called the intrenchant air, observed mildly, 'Did you put the cat out?'; and another voice replied, 'I didn't even set it on fire'. The second voice sounded much as that of Mrs. Crummles might have done in a recital of 'The Blood Drinker'. Domestic chat continued. Where was the son of the house? 'I thought he'd be back at ten o'clock dead', mused somebody. And in a dark drawl, crape-swathed and vibrating, the Voice answered, 'That would be wishful thinking, Edmond'. We have come to expect those coffin-bound tones at this period of the week. I don't know whether Mr. Silvey and Audience Research have yet discovered in how many homes the simple word 'milk' is now pronounced 'milluk'. It might be useful to hear.

Hermione Gingold, who is (if she will permit) the black heart of 'Home at Eight', has now reached a bee-loud eminence from which she could intone a Swiss telephone directory to wild laughter. The programme compilers have been lucky—or should it be astute? This Voice, which sends so many listeners to roll in the aisles—or the sitting-room equivalent—is worth riches to any script, however banal. To praise it now is to gild refined Gingold, but (trembling) I send my Christmas homage.

Gold is what that other Voice, Max Bygraves, would call 'lolly'. He has a generous, brush-it-off manner, a vocal 'spivverly' that comes through well in 'Educating Archie' (Light). I liked him as an examiner in a recent instalment. To the question, 'Where is Africa?', he insisted on the perfectly reasonable answer, 'Abroad'. Although this programme may be script-bound at times, it can flick into the right idiotic invention: thus Archie, turned sculptor, borrows a steam-roller to make the chippings on the floor into tarmac. Thanks to Brough, Archie can speak his way through most things: in this game the best hand is always in dummy. Straight drama has also its 'Squeaker', in another mood: he gives his name to Edgar Wallace's play (Light), which appeared first in 1928. It gets across still as a slickly complicated puzzle about the crooked men that live in crooked style. Wallace could be careless: in this piece the effects are accurately tuned, and Jack Hulbert had just the note for Captain Leslie. Norman Wright produced with enthusiasm.

I had always wondered how 'Bees on the Boat Deck' (Home) would act. It was one of Priestley's unluckiest plays—maybe he should not have called it a 'farical tragedy'—and certainly there is too much padding. Still, there is also—if one considers—much more than meets the ear. The dialogue that does meet the ear is often a joy. That is a nicely mad scene in which Gridley and Patch, 'on a note of loud despair', assail the Sergeant with such a speech as: 'How'd you like your junior compensator

to be packed tight with dead hornet queens and hairy caterpillars, the breast feathers of green woodpeckers, and dandelion fluff by the peck?' When the play, with a theme very much of its period (1936) came off on the air, it came off happily; some of its scenes went uneasily into radio, but, as a Priestley collector, I was glad to meet it, under Peter Watts' control, with that likeable actor, William Fox, to cope with Patch, and Gordon McLeod for Gridley.

It is Christmas-time, and it is reasonable for pantomime to be on the air, though not maybe as the string of panto-Variety turns we had in 'Up—And Coming!' (Home). Scriptmen let their comedians down: 'Here I sit dreaming alone in a brown study; when Brown comes I must go to my own study'. But Roberta Zane seemed to have a pleasant voice, and Dorothy Ward was, most properly, the compe. Last, a personal bee. We have had a repetition of the exciting 'Wars of the Roses' (Third), again with those mere fragments from 'Henry VI, Part I'. Sir Barry Jackson is to stage the play at Birmingham next June; many wait to know whether he or Professor Dover Wilson is right about its acting qualities. I back Sir Barry.

J. C. TREWIN

THE SPOKEN WORD

Series

A RADIO SERIES, I would say, is a set of more than two programmes under one title. Some series are planned, numbered, and announced beforehand, others launch out to seek their fortune and, if they succeed, extend themselves indefinitely, and if not, die an unobtrusive death. Of such is 'Framed Portrait' which I have already recommended. Sunday by Sunday, it is building up a select gallery of telling likenesses and, if I may judge by the three I have heard out of the six already executed, it has set itself a high level of artistry to live up to. Last week David Peel presented 'Mr. Toots' from *Dombey and Son* with a beautiful blend of the comical and the pathetic, and on the previous Sunday Gladys Young excelled even herself in a formidably lifelike reincarnation of 'Mrs. Gamp'. It was almost impossible to believe that the outrageous old woman was not there before our very ears in all her grossness, sharing the microphone with Miss Young who, in her own familiar voice, filled in the narrative passages, each of them giving place now and then to the unmistakable intrusions of Betsey Prig, while the atmosphere of my sitting room became more and more heavily charged with the vapour of gin. A wonderful performance. This series, if given its head, should in course of time give us a National Portrait Gallery of Famous Fictitious Characters.

'The Past Around Us' was the other kind of series. It was planned and announced at the outset for five programmes, its object being to present a region, village, ruined building, small town, and large city in a perspective of its human history pieced together from surviving evidence. The method used was conversation between three or four experts. Experts are not necessarily expert broadcasters and I did not expect or demand that the conversations would pass muster as spontaneous outpourings. One would probably be aware of a lurking script and the tone of conversation would probably suggest here and there the strait lacing of amateur theatricals rather than the unbuttoned nonchalance of the domestic hearth. This would be merely a minor defect, provided the historical picture was sufficiently enthralling. And in the first, second, and fourth programmes—I didn't hear the third—this was so. But when we got to Newcastle-on-Tyne a woeful change set in. The

programme was badly arranged and, much of it, deplorably executed. For long passages conversation ceased and its place was taken by a lecture so slow and so oppressive that even sleep became impossible. This is not to say that interesting details did not emerge from the programme, but they were no more than tit-bits. No comprehensive picture was built up and large tracts of the city's history were omitted, squeezed out by too prolonged attention to others.

On the Home Service, from Monday to Friday inclusive, Peter Churchill gave a series of brief readings at 11.15 a.m. from his recently published book, *Of Their Own Choice*, which describes his experiences as secret agent in France during the late war. The series began with a hair-raising description of his pushing off in a canoe for a beach near Cannes from the British submarine which transported him and his canoe to a point in the bay within sight of his objective. The hair-raising quality of the account lay not at all in Mr. Churchill's writing or reading, which were quiet, unsensational, and matter-of-fact, but in the close and economical accuracy of the description of his feelings and experiences which compelled the listener to share them. To objectify his narrative the more, he spoke of himself in the third person as Michel, one of the names he used when in France. Mr. Churchill's writing and reading were both admirable and the stuff itself enthralling.

MARTIN ARMSTRONG

BROADCAST MUSIC

Jolly Robins

THE THIRD PROGRAMME has by way of preparing us for the joys of Christmas provided a series of musical programmes which can only be described as 'proper cheerful' in the Lottish sense. *Item*, Schütz' 'Musikalische Exequien'. *Item*, a 'Dance of Death' by Honegger. *Item*, a concerto composed in memory of 6,000,000 murdered Jews. *Item*, Béla Bartók's 'Bluebeard's Castle', each scene of which dissolves in blood. *Item*, Strauss' even more blood-boltered 'Elektra'. After that we shall no doubt find the harrowing tale of the Spanish oppression of the Netherlands on Boxing Night highly diverting.

Individually these works were, or will be, well worth hearing—for, owing to the exigencies of the calendar, this article has to be written before hearing Bartók's opera—but their concentration in one week is rather overpowering and seems unseasonable. Nor, apart from the gaily enterprising 'Concert Hour' in the Light Programme, have the other wavelenghts provided much to interest the enquiring amateur of music. There was, indeed, late on the Sunday night after Schütz' beautiful funeral music, a recital by the Quintetto Chigiano, an excellent consort who played Boccherini and Dvořák with finesse and sensibility.

In this same programme appeared a French singer, Bernard Lefort, with a beautiful and well-produced voice—words which I pen with pleasure, since they have so seldom been applicable to the singing we have heard in recent weeks. He sang, beside Ravel's 'Don Quixote' songs which are, I think, undervalued, a cycle by his accompanist, Jean-Michel Damase, and some of Olivier Messiaen's 'Poèmes pour Mi'. Messiaen is not a composer for whose recent instrumental outpourings I have any liking, but these songs had a genuine quality and considerable originality in the use of the voice, for instance, in the dramatic coloratura of 'Prère exaucée'. The limitations of the song-form prevent Messiaen lapsing into mushiness, while his individual harmonic sense, based eventually upon Debussy, is able to make its effect without cloying.

There was also the Second Symphony of Daniel Jones, of which Walter Goehr and the B.B.C. Symphony Orchestra gave two performances. Despite, or perhaps because of, some ingenious manipulations of metre, this lengthy composition, which had to be faded out in the Home Service, does not fulfil its large design. The material is too scrappy in itself, and fails to cohere or develop into any significant utterance.

At a first hearing some of the orchestration sounded ineffective.

Of the modern works under review Honegger's 'La Danse des Morts' was by far the most impressive and successful as a composition. The music describing the assembling of the dry bones is wonderfully effective and the skeletons dance to a tune of almost nursery-rhyme simplicity, which is very moving. There was a parallel effect

of innocence in Mozart's Litany, which preceded this work, where the 'Agnus Dei' is set to a deliciously lamb-like melody, beautifully sung by Adèle Leigh.

Benjamin Fraenkel's Violin Concerto, inspired, like Honegger's 'Dance of Death', by events of the late war, suffers from the composer's emotions being too closely engaged.

DYNELEY HUSSEY

Stravinsky and 'The Rake's Progress'

By FELIX APRAHAMIAN

The opera will be broadcast at 7.40 p.m. on Friday, January 2, 7.30 p.m. on January 5, and 6.45 p.m. on January 6 (all Third)

IN the past forty years, during which time Igor Stravinsky has been one of the prime leaders of musical thought, he has never ceased to surprise. Not only has he been versatile in respect of musical media, but with each new work he has, in a sense, renewed the very elements of his art. The composer who could follow 'The Firebird' with 'Petrushka', and that by 'The Rite of Spring', then sacrifice a tonal palette of such richness for the black and white outlines of 'The Wedding', is no ordinary one. This phoenix-like capacity for self-renewal, of which in a sister art Picasso also holds the secret, Stravinsky has never lost. What pair of consecutive works in the output of any master affords so striking a contrast as two of Stravinsky's most recently published ones, 'The Rake's Progress' and the Mass which is its immediate precursor?

Years ago, Edwin Evans, that wise prophet of contemporary music, used to say that Stravinsky was heading for the composition of a Mass which might well prove to be his masterpiece. It is doubtful whether even he could have prophesied that it would turn out to be a work of such lapidary conciseness, the very quintessence of Stravinskian art. But I can imagine his delight at discovering that its successor was a full-length opera, Stravinsky's longest work in any medium. If the Mass, which was completed in 1948, is a small carving in crystal, 'The Rake's Progress', which occupied the composer from then until April, 1951, is a piece cast from a large mould, one that older masters have used, notably Mozart, with whose 'Don Giovanni' Stravinsky's opera has a marked affinity.

Stravinsky, who became an American citizen in 1945, first set an English text in 1944. This was in 'Babel', a short cantata for reciter, male chorus, and orchestra. Ever since he took up residence in the United States, he had been drawn to the idea of writing an opera in English. 'The Rake's Progress', as depicted in the famous Hogarth series, appealed to him both in subject and in period. His friend, Aldous Huxley, solved the problem of finding a suitable librettist to adapt the cautionary tale by suggesting W. H. Auden. Three months after a meeting between composer and poet, the text, in which Chester Kallman collaborated, was ready. It traces, in verse and prose and in three acts, the moral decline and fall of a young eighteenth-century Englishman.

It is spring. In the garden of her father's home in the country, Anne Trulove and Tom Rake-well are singing their love. Trulove offers Tom a post in the city, but Tom is reluctant to work. When Trulove returns to the house, Tom's laziness is apparent. 'Let me live by my wits and trust to my luck', he sings. No sooner does he wish for money than there appears at the

garden gate Nick Shadow, a stranger who combines in himself the Devil with a reflection of the worst side of Tom's character. He brings news of a fortune that Tom has been left. To claim it, they depart together for London. There the next scene finds them, not in an attorney's office, but in Mother Goose's brothel, surrounded by whores and roaring boys. Shadow overrides Tom's faint efforts to resist temptation. At home, Anne, without news of Tom, decides to follow him to London.

By Shadow's perverse argument to 'ignore those twin tyrants of appetite and conscience' Tom is persuaded into marrying Baba the Turk, a bearded freak from St. Giles's Fair. In the autumn dusk, Anne arrives before Tom's town house, only to encounter her sweetheart with—his wife. But Baba soon ceases to divert him. Shadow insinuates into his dreams a stone-into-bread machine which will make Tom's fortune.

Its exploitation ruins Tom, for in the first scene of the last act, Sellem, the auctioneer, is disposing of his property. The next scene finds Tom and Shadow in a churchyard. It is almost midnight, and the Devil reveals himself. He claims Tom's soul as his wages for the past year, but agrees that a game of cards shall decide Tom's fate. Tom wins. His life is saved. His mind is forfeit. The final scene is in Bedlam. Tom imagines himself Adonis, and Anne, who pays him one final visit, Venus. Tom dies. In an epilogue, sung before the curtain, Baba, Tom, Nick, Anne, and Trulove point the moral.

In his *Chronicle of My Life*, which unfortunately stops at 1935, Stravinsky makes abundantly clear the serious thought with which he approaches each new work before ever putting pen to paper. There is nothing improvisatory about his music or its form. He does not take his music from the air around him, nor does he build musical castles in it. His self-imposed task is to construct a tonal edifice according to a preconceived plan, carefully determined by the particular nature of the musical problem at hand. As it was with the 'Symphony of Psalms', so it is with 'The Rake's Progress'. In an important interview he gave before the first performance of his opera in Venice, on September 11, 1951, Stravinsky spoke with his usual precision of his attitude to opera in general and his approach to 'The Rake's Progress' in particular. He made the honest admission that to him Mussorgsky's 'Boris Godunov' says nothing, and Debussy's 'Pelléas et Mélisande' still less. 'Musical drama', he said, 'can create no tradition. It is the total absence of form. And for me non-canonic art (*arte a-canonica*) has no interest. *On doit toujours se borner, se donner des limites*. That is the condition of being truly free. Liberty can be attained only within accepted and well-defined limits. The vague, the indeterminate is suspect'. Then, talking of Verdi, he

extolled 'La Traviata' and 'Il Trovatore' at the expense of 'Otello' and 'Falstaff'.

All this, together with a previous exclamation in regard to 'The Rake's Progress'—'I will lace each aria into a tight corset'—recorded by Nicolas Nabokov, explains perfectly what Stravinsky has set out to do in his opera, and the traditional form he has sought to employ. The score itself leaves no doubt of this. A Mozartian orchestra of double woodwind, horns and trumpets, timpani, strings and harpsichord accompanies airs, ariosos, cavatinas, cabalettas, ensembles, and choruses, linked by *recitative secco* and *accompagnato*.

The result is anything but a Mozartian pastiche, for the mould contains a pure Stravinskian metal. Every bar is stamped with its composer's personality. The minutely chiselled art of the Mass is here expanded into a musical universe ranging from the familiar, malicious, barbed, and sprightly Stravinsky to lyrical beauty of a kind unique in his output. This melodiousness is, perhaps, the most striking feature of the opera to those who know the works that have preceded it. 'The Rake's Progress' abounds in singable tunes which are neither desiccated nor clipped. Some are haunting, such as Anne's opening, 'The woods are green', the lullaby she sings to Tom in Bedlam, and the ravishingly beautiful cavatina in which Tom invokes Love. All are ingratiating to the ear.

Harmoniousness as well as melodic charm is a feature of the opera. Not only does Stravinsky write unashamedly in C major when it pleases him, but he gives evidence throughout the work of a harmonic susceptibility which he relegated to the background when, after 'The Firebird', he became more interested in the other constituent elements of music. This may provide a clue to the kind of score he is likely to compose next. Or it may not. With Stravinsky one cannot tell. It is enough that the 'The Rake's Progress', first heard within a year of his seventieth birthday, has proved not the least of his many surprises.

The November number of *The British Museum Quarterly* (Vol. XVII No. 3), price 3s. 6d., opens surprisingly with an article on 'Lili Marleen', the German popular song which crossed the lines in the last war; after that it gets down to more serious topics, ranging from 'A Telegu Plate' to 'An Ancient Maori Bone-chest'. The annual report for 1951-1952 of the Friends of the National Libraries, published by the Oxford University Press, has now appeared. It contains several illustrations from the Holkham MSS, which have recently been bought from the Earl of Leicester for the British Museum with the aid of a contribution of £500 from the Friends. A copy of the first edition of *Alice's Adventures in Wonderland* (1865) has also been acquired for the Museum with the help of the Friends.

For the Housewife

Salads for Christmas

By BARDS CONOLLY

AFTER the rich accompaniments to turkey or goose that are traditional over Christmas, cold bird with salad is a pleasant change. Among the ingredients of salads that are at their best in the winter is watercress. It is a really good investment. Watercress is rich in iron and calcium—in fact, you get more food value from a bunch of watercress than you do from three times the quantity of lettuce.

Some people are inclined to fight shy of watercress—they think one can get food poisoning from it. But there is nothing to fear from the professionally grown kind. You can easily recognise it in the shops: it will be neatly bunched, and very often it carries a trade name on a ticket. That trade name means you are getting watercress grown under hygienic conditions. The leaves should be large and green. And, talking of cress, do not forget mustard and cress. Do not buy this if it is looking limp and soggy. But if it is sitting up perkily in its little chip, then take some.

Now about lettuce. To tell whether a winter lettuce is fresh, look at the stalk—where it has been cut. If the end looks brown, the lettuce has been cut for some time. Otherwise, it is just a case of going for a bright green leaf—and the firmest heart you can find. But, personally, at this time of year, I think you get better salad value from the heart of a cabbage. If you do buy lettuce, do not touch it with a knife—simply tear it with your fingers. But to get the best flavour

from the leaves you want to send them to the table whole. To keep lettuce fresh, I advise putting it in a saucepan—an aluminium one, with a tight-fitting lid. Then stand the pan on the floor. You can keep a lettuce perfectly fresh in this way for days.

Raw vegetable salads are very nutritious. You can use the heart of a cabbage, shredded; heart of celery; grated swede or turnip, and young spinach. When you are buying celery you want a head which has very few outer leaves. It ought to look long and slender except at the bottom, where a good, big heart makes it bulge, and, of course, it should be well blanched. And I would avoid celery if there is a very coarse corrugation on the outer leaves. The brown marks you get on celery do not matter a bit. Celery is grown on peaty fenland, and that is what gives it those marks—sometimes they are almost black—but they do not affect the quality.

Among the not-so-familiar salad ingredients is chicory. It is rather expensive, I know, but there is very little waste. Chicory is inclined to be a little bit bitter, so it is a good plan to combine chicory with beetroot—then you have the beetroot's sweetness to counteract the sharp flavour of the chicory. Remember when you are buying chicory that the whiter the leaf the better and milder the flavour.

I think it is important to introduce plenty of flavour into salads. For example, when you are in the greengrocer's, remember to ask him for

herbs. Some of them are delicious in salad—just a little pinch makes all the difference. At the moment you cannot buy many fresh herbs, but they are just as good dried. Fresh fennel and parsley you can get now. And do not forget mint—mint is delicious in salad, particularly with beetroot and with potato salad. Then, of course, spanish onion gives character to a mixture. And, as I have said, there is fruit to be considered, too. I think originality is all-important in salad making.—'Woman's Hour'

Notes on Contributors

- THE REV. H. A. WILLIAMS (page 1055): Chaplain and Fellow of Trinity College, Cambridge; author of *Jesus and the Resurrection*
- ELKA SCHRIJVER (page 1057): journalist and radio commentator in Amsterdam
- DR. HAROLD BARNES (page 1076): a principal scientific officer at the Research Station of the Scottish Marine Biological Association, Millport
- GUIDO CALOGERO (page 1080): Professor of Philosophy, Rome University, and Director of the Italian Institute of Culture, London; author of *Logo e Dialogo*, etc.
- K. J. FIELDING (page 1083): William Noble Fellow in English Literature, Liverpool University; an associate editor of the proposed new edition of Dickens' letters

Crossword No. 1,182.

The Festive Board.

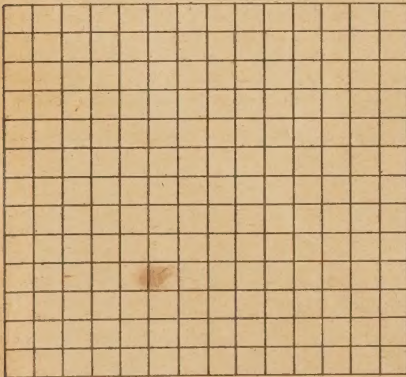
By Div

Prizes (for the first three correct solutions opened): Book tokens, value 30s., 21s., and 12s. 6d. respectively

Closing date: First post on Thursday, January 1

In the diagram, which contains no blocks or stops whatever, the horizontal rows must be imagined as denoted by the 'key' letters a to m downwards, and the vertical rows by the 'key' letters a to n from left to right. The square in which each letter of a light is to be entered is indicated, after the clue, by a pair of letters, the 'key' letter to the horizontal row being always given first. (Thus aa is the top left square, and mn the bottom right one.) Every letter is checked. Clues—the punctuation of which is to be disregarded—are indicated by numbers for the purpose of cross-reference only.

The correctly solved diagram, read in the normal fashion, gives a seasonable quotation followed by the three-letter surname of the author.



CLUES

1. Ayrshire without her is bent for a skate (fk,fe,mf).
2. Denied when in red (bn,en,hl,db).
3. Birds meditate head to tail (ch,ke,en,je).
4. Drier eaten at tea after tea so it's said (hg,ma,ii,jf).
5. Skilled eye in opposing directions (li,de,dm,hk).
6. Please fit a set to correspond (kj,dh,la,im).
7. Champagne? Why from the sound of it mother is pickled already! (ej,dh,ja,fd,fn).
8. Its past is a chapter unknown (em,jg,ih,ie,af).
9. Suet for the pudding? Yes, if we substitute for you, we hear (lg,ka,de,jb,de).
10. Twisted injury (cg,fg,ed,el,fe).
11. Drunk? Sober? Yes. Could be (kf,bk,ij,jn,bh).
12. By gum, when doubled sounds like 'the' that springs from the growing of grass? (lb,ge,dj,jm,hf).
13. Stop! Need a dwelling? (ek,jh,ij,ea,dk).
14. Tom was tiny (jk,il,bj,lb,kf).
15. Spring profits (in,cl,ga,md,dm).
16. 'As the green winter of the — Tree' (aa,hg,ia,bl,fn).
17. Berlin's 49 was (be,dd,ed,lj,ca).
18. Brown abstraction contrivance (hd,ei,ie,ef,ig).
19. 'The — that springeth out of the wall' (aa,ig,ld,ln,ak,gb).
20. E. A. essay? He wrote this too, (df,kk,dk,fi,me,mn).
21. About a hundred as above give a round of entertainment (em,in,bg,ke,cj,lf).
22. 'For his —, There was no winter in't' (ad,me,eh,kh,jf,ge).
23. Is inclined to follow Spenser back about the issue (jd,la,ea,il,bc,gn).
24. Present era opening the period before 49 partly in 40 (mm,ai,ba,gd,an,ha).
25. Lutwidge's songs? (gj,hm,me,ak,ce,li).
26. A light gig goes with a splash (jd,hf,mi,gn,eb,il,mn).
27. Flourishes following deeper south (ee,hn,ab,ac,lm,gc,je).
28. Rule with a pen for purity (ik,ab,ai,hj,hl,ha,mf).
29. Feels myths about noon (ee,mm,hb,ge,di,db,fb).
30. Woman can be from pole to pole but a frigid creature (ag,mj,dg,ak,kl,if,fh).
31. When Cymric are sometimes excellent pieces to wisecracks (dn,ek,ci,eg,kg,im,gf).
32. Spat in wonder? Vice versa. E.g., carriage (cl,jl,le,ka,bf,ca,bd).
33. Surfeit of arboreal eggs (ce,mb,ef,fk,km,gg,de).
34. Put 2 & 2 together when a brief positive's come around (ke,bi,kl,da,kd,ah,le).
35. Parisian place of judgment in sacred surroundings (aj,kk,di,ih,gi,en,ji).
36. Explosive pin-tail ducks? Lies (em,ld,ek,eb,fl,km,fa,ih).
37. Viols partly insult an Asiatic (ag,ic,ae,jk,he,th,hm,kj).

38. Intemperate consequences linger longer (mh,le,hk,ml,ib,mh,eh,gl).
39. Yet Euclid was confounded short of a century to make this time (ji,eh,ia,gd,ei,bb,fc,mk).
40. See 24 (le,ki,em,kb,ke,ci,jb,gl).
41. Boast how a novelist's craft is gotten (ih,mh,fg,eg,ad,me,en,kn).
42. Page takes ill any deed or writing (df,jm,fm,he,mk,gk,ek,ah).
43. Hoos mon! (md,bl,fj,ce,if,ck,tm,ga).
44. Government of animals by animals for animals (dn,hj,mi,gh,bd,jl,ef,dl).
45. Chop fine ordinals for a 49 9 (hb,kg,ff,mg,am,gb,je,bf,li).
46. Seems to me an imp — the making of the show (da,gr,ee,kl,bf,ie,gn,ja,ik,bl,ef,gl).
47. Thrush on the front of the hoof? More like beriberi! (fd,bb,gf,kn,ae,af,fi,kd,lc).
48. Point halfway between the extremes of 23 (he,ib,ed,hi,gk,be,bh,ij,dj).
49. See 24, 50 & 54 (mg,jg,hh,bm,jj,dj,ik,ma,hn).
50. Fillings filled with 42 at 49 (ld,hi,ee,eb,ed,mj,ml,fb).
51. Who and what can be versatile? (hh,am,hn,fe,ik,je,ba,ki,hd).
52. He will throw words about, the half half-witted sheep (ac,jh,fa,gi,jn,ai,ij,bg,il,jd).
53. Not to give enough to eat after 9 a.m. upsets the hours (cj,el,ef,lm,gc,kh,dg,bj,bk,gm,ff,aj).
54. Sincere ure associated with 12 at the first 49 (bn,id,he,an,fl,bm,ff,gj,kb,ee,lg,il).

Solution of No. 1,180

T	R	U	T	H	S	A	S	R	E	F	I	N	D	I
G	E	O	F	G	R	A	N	I	T	E	I	N	T	G
D	T	H	E	B	A	R	G	E	T	H	E	O	N	
E	M	I	A	N	C	E	A	F	A	L	L	L	A	
L	O	G	I	A	S	C	O	R	A	L	E	D	G	T
R	E	O	A	S	P	E	A	S	N	O	R	I		
S	F	L	N	T	I	N	T	E	R	R	T	L	R	A
N	R	A	L	T	R	E	U	S	T	S	R	O	O	N
O	U	T	A	M	N	I	A	F	A	R	E	I	C	
I	H	H	B	S	O	M	A	R	O	N	D	R	I	A
T	T	S	L	E	D	A	E	R	D	A	T	E	N	
A	R	E	A	N	E	S	U	S	I	N	S	B	N	
D	A	H	D	N	A	S	F	O	S	N	O	I	A	
N	E	H	Y	H	T	F	O	S	W	E	N	I	S	L
U	O	F	S	H	T	R	A	E	T	R	E	G	N	O

Prizewinners: 1st prize: L. G. Henley (Bileford); 2nd prize: J. A. Peartree (Sidcup); 3rd prize: J. Martin (Dunfermline)

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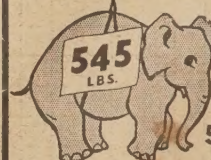
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